



Environmental & Combustion Controls



Honeywell Environmental & Combustion Controls

This catalogue provides a comprehensive overview and selection guide for Honeywell NZ Environmental & Combustion Controls (ECC).

ECC encompasses an extensive range of products for homes buildings and industrial applications.

Technical Information

Technical specifications on many of the products can be found on the internet:

Honeywell ECC European Website

<http://products.ecc.emea.honeywell.com/europe/>

Honeywell ECC USA Website

<http://customer.honeywell.com/Business/Cultures/en-US/Default.htm>

Honeywell ECC Asia Website

<http://customer-ap.honeywell.com/APAC/Cultures/en-US/Default.htm>

Or call your Honeywell Authorised Distributor

How to Buy

Honeywell Environmental Controls products are sold through Authorised Distributors and Electrical Wholesalers.



Products and specifications in this catalogue are subject to change without notice.

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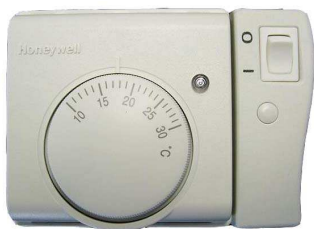
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Room Thermostats



- **Mechanical room thermostats for heating & cooling applications**

Low cost attractive room thermostats.

Features

Vertical or horizontal mounting.

Neon indicator (except T4360B)

On/off switch (except T4360B)

Fits over standard flush box (except T4360B)

Large easy to read dial

Tamper proof cover option, model F42007110-001

Refer to Fan Coil section for 2 stage heating and cooling

Mechanical Room Thermostats

<i>Model Number</i>	<i>Switching Application</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
T4360G1006	SPDT contacts Heating	16 A Res. Heat 10 A Res. Cool 240 VAC	10 to 30°C	On/off switch Neon indicates heating on
T4360B1031	SPDT contacts Heating	16 A Res. Heat 240 VAC	10 to 30°C	No sub base Euro flush box mounting
T6360D1008	SPDT contacts Cooling	10 A Resistive 3 A Inductive 240 VAC	10 to 30°C	On/off switch Neon indicates cooling on
T6360E1005	Heat pump model Heat/Off/Cool	10 A Resistive 3 A Inductive 240 VAC	10 to 30°C	On/off switch Heat/cool switch Neon indicator



- **Digital room thermostat for heating or cooling applications**

An attractive battery powered digital room thermostat for heating or cooling applications.

Features

Large easy to read digital LCD display

Battery powered 2 x AA

Self-learning TPI Fuzzy Logic control

Adjustable proportional band and on/off time (1 to 5 minutes)

Set point limits

Positive off or frost protection

Installer mode

Environmental protection IP30

Fits square Euro flush box or surface mount

Wireless remote relay with DT92

DT90 Digital Room Thermostats

<i>Model Number</i>	<i>Switching Application</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
DT90A1008	SPDT H or C	8 (3)A Resistive 230 VAC	5 to 35°C	
DT90E1012	SPDT H or C	8 (3)A Resistive 230 VAC	5 to 35°C	ECO economy set back button
DT92A1004	SPDT H or C	5 (3)A Resistive 230 VAC	5 to 35°C	Remote controlled relay

Programmable Electric Under-Floor Heating Control



Wall Plate

- **Programmable digital thermostat complete with floor probe, heating only**

These ultra-compact thermostats provide precise control of either ambient temperature with a floor temperature limit or floor temperature control.

Features

Heating cycles: 15 min.

Accuracy: $\pm 0.5^{\circ}\text{C}$ / 0.9°F

7-day, 4 time periods/day, 2 temp. settings

Early Start function

24-hour clock / $^{\circ}\text{C}$ or $^{\circ}\text{F}$

Dimensions 82 x 78 x 25 mm

Floor sensor included, spare floor sensor model AC112-01

Wall plate for NZ Flush box, model AC130-12-P10

TH232 has an On/off button and backlit display

For inductive loads order AC130-04 Snubber 0-650 VA

TH132 Under Floor Heating Thermostat

<i>Model Number</i>	<i>Switching Application</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
TH232-AF-230-OEM/U	Floor only control or air control with floor limit or air only control	15A Resistive 230 VAC 3.45 kW	5 to 30°C	4.6 m floor probe Use wall plate for standard flush boxes
TH132-AF-230-AA/U	Air control with floor limit	15A Resistive 230 VAC 3.45 kW	5 to 30°C	As above



Wall Plate

- **Electronic dial thermostat complete with floor probe, heating only**

These ultra-compact thermostats provide precise control of either ambient temperature with a floor temperature limit or floor temperature control.

Features

Heating cycles: 15 min.

Accuracy: $\pm 0.5^{\circ}\text{C}$ / 0.9°F

Dimensions 82 x 78 x 25 mm

Floor sensor included

Installer set point limits

Wall plate for NZ Flush box, AC130-12-P10

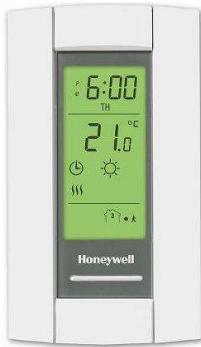
Spare floor probe, model AC112-01

For inductive loads order AC130-04 Snubber 0-650 VA

TH131 Under Floor Heating Thermostat

<i>Model Number</i>	<i>Switching Application</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
TH131-AF-230-AA/U	Heating only Air control with floor limit Or air only control Or floor only control	15A Resistive 230 VAC 3.45 kW	15 to 35°C Min position is 7°C	4.6 m floor probe Use wall plate for standard flush boxes

Programmable Thermostat Electric LineVoltPRO



- **LineVoltPRO programmable digital thermostat with air sensor, heating only**

Attractive easy to use 7 day programmable thermostat.

Advanced temperature control ensures total comfort by minimizing temperature swings. 7 day programmable with comfort and economy set points. Four temperature changes per day. On/Standby switch enables the heating to be switched off. Back lit large LCD display. Power usage indicator. Quiet switching technology. Air Sensor. No batteries required. Install AC130-04 SNUBBER inductive loads 0 to 650VA.

LineVoltPRO Programmable Room Thermostat				
<i>Model Number</i>	<i>Switching Application</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
TL8130A1005	4 wire SPST Heating only	Max. 16.7A Resistive 240 VAC Min. 0.1A	5 to 30°C	7 Day program Buttons located under swing out panels On/off switch Fits std. flush box

Programmable Thermostats Electric or Hydronic



- **Programmable digital thermostat**

Attractive modern styling
 Heating or cooling
 7 day program
 Up to 4 temperature set point changes per day
 Room temperature display
 Manual mode for use as simple thermostat
 Installer set up mode, boiler minimum on time, pump exercise, min/max set point limits
 Supersedes CM27 T6651E, does not have remote temp sensor capability

CMT700 Thermostat				
<i>Model Number</i>	<i>Switching</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
CMR707A1049	SPDT	5A Resistive 2A Inductive	5 to 35°C	P + I Control Minimum on time for boilers

- **Advanced programmable digital thermostat
supersedes the popular CM67**



Attractive modern styling
 Heating or cooling
 Blue backlit digital display
 7 day program
 Up to 6 temperature set point changes per day
 Room temperature display
 Manual mode for use as simple thermostat
 Holiday mode provides minimum room temperature while on holiday
 Installer programmed minimum on time for boiler applications
 Installer programmed set point limits
 Remote radio controlled relay version to solve wiring difficulties
 Note CMT907 is not compatible with CM67 T6667B1002 probes

CMT900 Thermostats				
<i>Model Number</i>	<i>Switching</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
CMT907A1041 <i>Supersedes T6667B1002</i>	SPST internal relay	8A Resistive 3A Inductive	5 to 30°C	P + I Control Selectable cycle rate Selectable heat or cool
CMT927A1049 <i>Supersedes Y6667D1003</i>	Remote SPST relay (shown above)	230 VAC supply 5A Resistive 3A Inductive	5 to 30°C	As above with separate relay operated via radio control Table stand or wall mounting parts included

Optional CMT907 Remote Temp. Sensor				
<i>Model Number</i>	<i>Sensor Type</i>		<i>Length</i>	<i>Note</i>
CM90-RS5	Floor Sensor		5 meters	CMT907 only, max 50 metre extension
F42010972-001	Indoor			As above, attractive wall mount
F42010971-001	Outdoor		2 metres	As above, 6.5 x 18mm dia. Includes mounting clip

New**Programmable Ventilation Control**

- **VEC8675 Ventilation controller for residential or commercial buildings**

The VEC8675 series digital controller is designed to provide complete control for a range of Ventilation applications. These include fan control, fan control with air quality sensor and fan control with air quality sensor and by-pass control. A one day time program can be enabled for automatic energy savings while the room is unoccupied.

The back lit LCD display provides useful user information including fan speed, air quality level and by-pass status. If required the buttons can be locked to limit end user tampering.

Features

Manual or automatic 3-speed fan control (also 1 or 2 speed control)
 By-pass control output
 Optional indoor air quality monitoring using CO₂ or TVOC 0-10 VDC sensor
 Bar graph display of air quality
 Filter replacement warning (adjustable 1 to 4 months)
 Continuous or 1 day time program mode
 Key pad lockout
 Temperature range 0-37°C
 Slim 14mm profile

Requires a square European flush box for wall mounting.

VEC8675 Ventilation Control				
Model Number	Switching	Electrical Rating	Program	Features
VEC8675WP10	3-Speed Fan	220 Volt 4(2) Amp	1 Day	
VEC8675WP20	3-Speed Fan	220 Volt 4(2) Amp	1 Day	CO ₂ or TVOC 0-10 VDC sensor input Use C7632A1004 for room CO ₂

Hydronic Timers



- **ST9000 programmable digital hydronic timers**

The new ST9000 family of electronic time controls is a range of market leading products that covers all applications from 1 day control of combi boilers to 7 day control of central heating and stored hot water systems, and also 2 zone time control.

All products have state-of-the-art LoT™ Technology with a large backlit display to make them extremely user-friendly.

Features

Attractive modern styling

Large backlit display,

7 day models settable for 5/2 or 1 day operation.

Up to 3 on/off periods per day.

Holiday button, on 7 day models.

Extra hour facility, for up to 3 hours of boost or programme extension.

Models available with programmable boiler Service reminder and shut-down feature.

Installer configuration modes,

Battery backup to maintain real-time and date in event of power failure.

NVRAM storage of programmes and all setup parameters, ensuring these are never lost.

ST9000 Timers				
Model Number	Switching	Electrical Rating	Program	Features
ST9100C1006	SPDT	230Volt 3A Res. 3A Inductive 10mA at 12Vdc min.	7 Day	1 Channel for heating circuit Fits horizontal flush box
ST9400C1000	2 x SPDT	230Volt 3A Res. 3A Inductive 10mA at 12Vdc min.	7 Day	2 Channel for heating circuit and stored hot water Fits horizontal flush box

Thermostat Guard



- **Lockable vented boxes for thermostat protection**

Lockable covers to enclose and protect thermostats or humidistats against damage or unauthorised tampering. Made of clear acrylic with ventilation slots on all four sides to provide adequate airflow.

Usable inside dimensions listed below in brackets. TG511 can be used with CM907 & T4360/T6360 thermostats.

Lockable Guards				
Model Number	Size	Height mm	Width mm	Depth mm
TG512A1009	Large	(124) 184	(187) 248	(86)
TG511A1000	Medium	(105) 165	(130) 191	(75)

Smartfit Hydronic Heating Control System



- Innovative new system with programming module, wiring/switching module, valves and sensors connected via low voltage wiring and plug-in connectors, using digital communications between system components. For control of traditional hydronic heating and stored hot water systems in homes and small buildings.



Approvals CE
 Power supply 230 V;50Hz | 10 VA
 Control output relays
 Switch function/capacity SPDT 230 Vac, 3 A resistive, 3 A inductive ratings
 Temperature setpoint range 5 ... 35 °C
 Control functions time proportional P+I control on/off output for heating,
 on/off differential output for stored hot water



Time setting resolution 1 min for clock, 10 min for programmes
 Memory back up battery backup maintains real time for 24 hours,
 programmes stored in NVRAM
 Temperature setpoints per day 1 or 3



Modes of operations off/auto/once/cont
 Programmed on/off periods per day 3
 Independent zone programmes yes
 Port connection type coupling compressing fitting
 Holiday mode yes
 Product literature language English



Additional description The Smartfit system comprises a Room Unit with Display and User programming features, a Base wiring Unit, Hot Water Sensor, Valve Actuator, and Valve(s), with plug-in connector cables to make installation easier. Additional features of Smartfit enhanced system

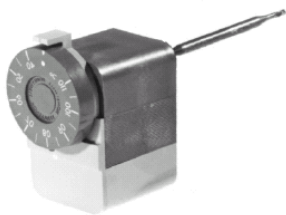


optimisation - adaptive intelligent recovery (AIR) for 7-day models:
 installer setup mode - allows adjustment of control parameters and limits, and configuration of accessory devices
 optional LCD backlighting
 built-in fault diagnostics with fault-code display to assist commissioning and fault detection
 Automatic time setting option (with ATS module)
 Replacement actuator model ML7300A1004
 Replacement room unit model T8677B1006
 Replacement base unit model W4672A1009

Smartfit				
Model Number	Description	Plan	Valve Size*	Features
Y4610A1010	7 day	Y Plan (3 way divert valve)	22mm (3/4 in.)	Optimum start
Y4610A1036	7 day	S Plan (2 x two way valves)	22mm (3/4 in.)	Optimum start

*28mm (1 in.) also available

Aquastats



- **Popular thermostats for a variety of water heating applications.**

Honeywell manufactures a comprehensive range of Aquastats for controlling heating systems. These sensitive, fast response devices are available in either direct, panel or surface mount versions.

The liquid filled sensing element, including well or sensor assembly, responds to temperature changes of water in a heating system.

The sensor assembly, used on the surface mounted aquastat, envelopes the sensing capsule by means of an aluminium heat shield for better heat conduction, an insulator of glass-wool and a mounting bracket.

Features

6.3 mm quick connect terminals for receptacles

Mounting either in a horizontal or vertical position.

Panel mount housing is provided with two mounting holes, which are suitable for M4 thread forming screws.

Cable entry in the conduit box is suitable for Pg 13.5 conduit.

Capillary length 1500mm. Pocket insertion length 105mm including thread.

Surface mounted Aquastat can be mounted on cylinders of 300 ... 460 mm diameter as well on pipes from 40 ... 150mm diameter.

Manual reset models have a setpoint adjustment located behind the front cover to prevent tampering. It has a red reset button for manually resetting the Aquastat.

Ambient rating 0 to 70°C

SPDT

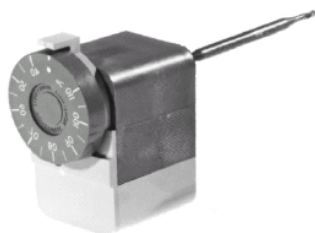
10A 250Vac Resistive Load

2.5A 250Vac Inductive Load

15A 250Vac Locked rotor

Model selection on next page

Aquastats



Direct Mount				
Model	Temp. Range °C	Switching Diff. °C	Set Point Adjustment	Features
L6188A2002	25 to 95	4-10	Dial	Inc. pocket
L6188A2010	40 to 110	4-10	Dial	Inc. pocket
L6188C2016	25 to 95	Man. reset	Screw	Inc. pocket



Remote Mount, 1.5m Capillary				
Model	Temp. Range °C	Switching Diff. °C	Set Point Adjustment	Features
L6188A2028	25 to 95	4-10	Dial	Mounting feet
L6188C2008	70 to 140	Man. reset	Screw	Mounting feet

Order pocket separately, model 45900409-003B 1/2" BSP, 105mm insertion depth including the thread.



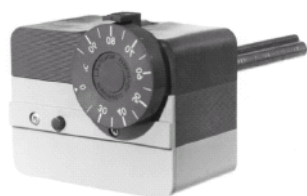
Panel Mount, 1.5m Capillary				
Model	Temp. Range °C	Switching Diff. °C	Set Point Adjustment	Features
L6189A2043B	40 to 110	4-10	Dial	
L6189C2007B	40 to 110	Man. reset	Screw	

Panel mount models mount inside a panel (or box). The dial or manual reset set point screw adjustment can be set from the outside of the panel.

Order pocket separately, model 45900409-003B 1/2" BSP, 105mm insertion depth including the thread.



Strap On, Pipe Surface Mount				
Model	Temp. Range °C	Switching Diff. °C	Set Point Adjustment	Features
L6190B2006	25 to 95	8	Screw	2 metre mounting strap
L6190C2004	25 to 95	Man. reset	Screw	2 metre mounting strap



Dual Aquastat				
Model	Temp. Range °C	Switching Diff. °C	Control	Features
L6191B2005	25 to 95 40 to 110	4	On/off Man. reset	Dual pocket
L6191B2013	40 to 110 40 to 110	4	On/off Man. reset	Dual pocket
L6191A2007	40 to 110 40 to 110	4 to 10 4	On/off On/off	Dual pocket

Dual Aquastat pocket (included above) model 45900409-007B

T675, T678, T6031 & L4008 Capillary Thermostats



- **High accuracy capillary thermostats**

Accurate thermostat with remote sensing bulb. T675A contains 1 x SPDT switch. The T678A has 2 x SPDT switches that operate in sequence. Switch rated for 5.1A, 240Vac

T675 bulb size is 105mm x 12.5mm diameter. T6031 and L4008 bulb size is 73mm x 10mm dia. See below for capillary length.

Part number **112622AA** is the pocket suitable for T675 thermostats. Use **121371A** for T6031 and L4008 thermostats

Capillary Thermostats				
<i>Model Number</i>	<i>Style</i>	<i>Capillary Length</i>	<i>Range</i>	<i>Differential</i>
T675A1029	Single Thermostat	6.0 Metres	0 to 100°F	3 to 10°F
T675A1169	Single Thermostat	1.5 Metres	-15 to +35°C	1.7 to 5.6°C
T675A1284	Single Thermostat	1.5 Metres	-15 to +35°C	1°C fixed
T675A1466	Single Thermostat	1.5 Metres	+15 to +75°C	1.7 to 5.6°C
T675A1474	Single Thermostat	6.0 Metres	+15 to +75°C	1.7 to 5.6°C
T675A1243	Single Thermostat	1.5 Metres	+75 to +125°C	1.7 to 5.6°C
T678A1155	Two Stage Thermostat	1.5 Metres	-15 to +35°C	1.7°C fixed 1.7 to 5.6° inter-stage
T678A1395	Two Stage Thermostat	1.5 Metres	+15 to +75°C	1.7°C fixed 1.7 to 5.6° inter-stage
T675B1002	Manual Reset	1.5 Metres	30 to 50°F	
Refrigeration, Air & High Temp. Thermostats				
T6031A1086	Single Thermostat	2.4 Meters	-35 to +35°C	2 to 9°C
T6031C1041	Single Thermostat	1.7 Meters	+5 to +80°C	1.1°C
L4008A1130	Single Thermostat	3 Meters	+110 to +270°F	3 to 17°F
L4008E1040	Manual Reset	1.5 Meters	+110 to +290°F	

T631 Thermostats



- **Rugged wall mount thermostats**

A wall mountable thermostat with a corrosion resistant metal case. Used to control air temperature in lift rooms, cool rooms, barns, etc where a rugged thermostat is desirable. T631C1160 includes ground screw.

5A resistive load @ 240 V AC

T631 Thermostats				
<i>Model Number</i>	<i>Description</i>	<i>Switches</i>	<i>Range</i>	<i>Differential</i>
T631B1054	2 Stage Thermostat	2 x SPDT	36 to 100°F	Switch diff. 2.0°F 0 to 7°F between stages
T631C1038	Single stage thermostat	1 x SPDT	-10 to +30°C	1.7°C
T631C1046	Single stage thermostat	1 x SPDT	+20 to +60°C	1.1°C
T631C1160	Single stage thermostat	1 x SPDT	+20 to +60°C	1.1°C

Electronic 4 Stage Controller



- 4 stage electronic on/off or 2 stage floating controller

The T775 electronic stand-alone controllers are the next generation of commercial and agricultural controls capable of remote sensing of temperature and providing switched and/or proportional outputs to various types of loads. Voltage: 24/120/240 Vac, 50/60 Hz. Supplied with 50021579-001 Platinum Sensor 2-5/8 in. (67 mm) long, 3/8 in. (9.5 mm) dia. Lead wires 6 in. (125 mm).

T775 Temperature Controllers

Model Number	Output	Control Mode	Range	Features
T775B2040	4 x SPST	On/off or 2 floating outputs	-40 to +120°C	Internal time clock scheduler

Proportional Temperature Controllers



- Mechanical modulating controller

For modulating control of valve and damper actuators etc, using a 135 ohm signal, (series 90).

Sensor bulb dimensions: 105mm x 12.5mm diameter

T991A Temperature Controllers

Model Number	Style	Capillary Length	Range	Proportional Band
T991A1095	135 ohm	1.5Metres	-15 to +35°C	1.7 to 16.7°C
T991A1103	135 ohm	6.0 Metres	-15 to +35°C	1.7 to 16.7°C
T991A1152	135 ohm	1.5Metres	75 to 125°C	1.7 to 16.7°C
T991A1210	135 ohm	1.5Metres	15 to 75°C	1.7 to 16.7°C

Fan Limit Switch



- Forced air thermostatic control

For control of high limit and fan motors in all types of forced air heating systems. These units utilise a tightly coiled bimetal element that responds quickly to a temperature change. 11.5 inch insertion depth.

L4064B2210 replaces L4064B3069 & L4064B1451.

L4064R1134 replaces L4064N1058

Fan Limit Switches

Model Number	Description	Buttons	Range	Features
L4064B2210	Fan Limit Switch	1 Button	50 to 250°F Adj. limit at 200°F	Fan auto/manual
L4064N1058	Fan Limit Switch	2 Button	100 to 305°F Adj. limit stop 250°F	Fan auto/manual with high limit

Fan Coil Thermostats, 230 Volt



- **Wall mounted line voltage fan-coil thermostat. Ideal for hotels. For control of the valves, or the valves and the fan in 4-pipe fan-coil applications, with the possibility of also being used for the control of split units or small air-conditioners.**

Approvals	CE
Protection class	IP30
Switch function/capacity	SPDT 230Vac, 4 A resistive, 2 A inductive ratings
Temperature setpoint range	10 ... 30 °C
Differential fixed	1 °C
Temperature sensing element	vapour filled
Place of sensing element	built in
Heat anticipator	yes
Heating /Cooling application	H + C
Terminal max. wire size	1,5 mm ²
Earthing	double insulated
Housing (HxWxD)	130 mm 85 mm 40 mm
Additional description	T6374C and T6375C have sequence control with a deadband of 1.5 °C between heating and cooling operating points
Replacement Parts	Dial model R42006961-001, min. order 20

XE70 Thermostat				
<i>Model Number</i>	<i>Switching</i>	<i>Fan</i>	<i>Range</i>	<i>Features</i>
T6375C1003	Automatic heating/cooling change over	3 speed manual control	10 to 30°C	On/off switch
T6374C1012	As above	No fan switch Optional 1 speed auto fan	10 to 30°C	On/off switch Anticipator

Fan Coil Thermostats, 230 Volt



- **Halo T6800 fan coil heating or cooling thermostat with large display and very slim wall profile**

T6800 digital thermostats are designed for applications requiring 3-speed fan and valve control in 2 pipe fan coil systems. 220V power supply: 4(2)A for fan load, 2(1)A for zone valve

Features

Manual or automatic 3-speed fan control.

LCD display 42 x 67mm (smaller than picture opposite)

Optional remote sensor input (NTC20K thermistor)

Reset to default set point using remote contact closure switch

Installer set point limits

Ventilation mode, fan operation only

15.8mm slim profile with in wall connection block & power supply

Replacement relay module model 50024980-009

Halo 2 Pipe Thermostat

<i>Model Number</i>	<i>Switching</i>	<i>Fan</i>	<i>Range</i>	<i>Features</i>
T6800H2WN	2 pipe Heat or Cool	3 speed manual or auto	10 to 32°C	Horizontal mounting White frame Not for Heating & Cooling
T6800V2WN	2 pipe Heat or Cool	3 speed manual or auto	10 to 32°C	Vertical mounting White frame Not for Heating & Cooling



- **Halo T6861 fan coil heating & cooling thermostat with large display**

The HALO fan-coil digital thermostat series blends a stylish slim-line design with a large blue backlit screen. The HALO is perfect for offices, hotels and residential apartments. 220V power supply: 4(2)A fan load, 2(1)A zone valve load.

Features

Heating and cooling control for 2 or 4 pipe fan coil systems

3 speed fan control with selectable ventilation only mode

Optional remote NTC20K sensor input

Remote card key switch input to reset back to energy saving set point

Installer set point limits

Horizontal or vertical options

Maximum display temperature 37°C

Halo 4 Pipe Thermostat

<i>Model Number</i>	<i>Switching</i>	<i>Fan</i>	<i>Range</i>	<i>Features</i>
T6861H2WB	2 or 4 pipe Heat & Cool Auto	3 speed manual or auto	10 to 32°C	Horizontal mounting Blue back light 16.8mm profile
T6861V2WB	2 or 4 pipe Heat & Cool Auto	3 speed manual or auto	10 to 32°C	Vertical mounting Blue back light 16.8mm profile

Electronic Thermostats, 24 VAC



- **FocusPRO 5000, non-programmable digital thermostat**

FocusPRO 5000 is designed to provide ultimate ease-of-use for contractors and homeowners.

The thermostat features a large, backlit digital display that prominently shows both room temperature and set temperature. FocusPRO is easy to install in a wide range of heating and cooling applications including forced warm air, heat pumps, hot water, 750-millivolt, steam and gravity systems Large, Clear, Backlit Display: Easy-to-see.

Features

Auto or manual Heat/Cool change over

Selectable single speed fan control

Built-in Compressor Protection: Minimum-off timer

Selectable degrees C or F display

FocusPro 5000 Thermostats

<i>Model Number</i>	<i>Switching</i>	<i>Electrical</i>	<i>Range</i>	<i>Features</i>
TH5110D1022/U	1 Heat/ 1Cool Conventional or Heat pump	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Also 750mV control
TH5220D1029/U	2 Heat/ 2Cool Conventional or Heat pump	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Emergency heat output Also 750mV control



- **FocusPRO 6000, programmable digital thermostat**

FocusPRO 6000 is designed to provide ultimate ease-of-use for contractors and homeowners. Conventional and heat pump programmable thermostat with large display.

FocusPRO is easy to install in a wide range of heating and cooling applications including forced warm air, heat pumps, hot water, 750-millivolt, steam and gravity systems

Features

Auto or manual Heat/Cool change over

Selectable single speed fan control

Built-in Compressor Protection: Minimum-off timer

Selectable degrees C or F display

Weekday/Weekend programming - use as a 5-1-1 (Weekdays, Saturday, Sunday)

FocusPro 6000 Thermostats

<i>Model Number</i>	<i>Switching</i>	<i>Electrical</i>	<i>Range</i>	<i>Features</i>
TH6110D1021/U	1 Heat/ 1Cool Conventional or Heat pump	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Programmable Also 750mV control Replaces T8602C
TH6220D1028/U	2 Heat/ 2Cool Conventional or Heat pump	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Programmable Also 750mV control Replaces T8611G

Domestic & Commercial Prog. Thermostat, 24 VAC



- **VisionPRO™ 8000, programmable touch screen thermostat**

The VisionPRO 8000 Touch-screen Programmable Thermostat is an effortless, seven day programmable thermostat that provides universal system compatibility, precise comfort control and is easy to-program. The VisionPRO provides temperature control for gas, oil, electric and heat pumps for up to 2 heat, 2 cool systems. Configurable for 7 day program.

- Large, clear display with backlight shows the current and set temperature and time even in the dark.
- Beautiful ergonomic design.
- Touch-screen interaction Real-time clock keeps time during power failures and automatically updates to daylight savings.
- Holiday Override options allow you to override the program schedule, as desired.
- Armchair programming allows you to remove the thermostat from the wall for programming.
- Selectable degrees C or F display
- Remote Sensors NTC10K (TB8220 will also accept NTC20K sensors)
C7189U1005 Remote white indoor wall mount sensor, 70mm width x 117mm height x 27mm depth
- C7089U1006 Remote outdoor sensor with mounting clip, 57mm. x 9.5mm with 1.5m. lead wires. Can be extended 60m.
- Auto or manual Heat/Cool change over. Selectable single speed fan control. Selectable 7 day program or non-programmable modes.

VisionPro Thermostat				
<i>Model Number</i>	<i>Switching</i>	<i>Electrical</i>	<i>Range</i>	<i>Features</i>
TH8110U1003/U	1 Heat/ 1Cool Conventional or Heat pump	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Domestic applications Also 750mV control 4 Program periods
TH8320U1008/U	2 Heat/ 2 Cool Conventional or Heat pump (plus Em Heat)	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Domestic applications Also 750mV control 4 Program periods
TH8321U1006/U	2 Heat/ 2 Cool Conventional or Heat pump (plus Em Heat)	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Domestic Humidity Control Also 750mV control 4 Program periods
TB8220U1003/U	2 Heat/ 2 Cool Conventional or Heat pump (plus Em Heat)	24 VAC common wire or 3 x AAA battery powered	4.5 to 35°C	Commercial 2 Occupied and 2 unoccupied program periods per day Also 750mV control

Commercial Programmable Thermostat, 24 VAC



- **T7351 Commercial programmable thermostat**

The T7351 Commercial Programmable Thermostat controls 24 Vac commercial single zone heating, ventilating and air conditioning (HVAC) equipment. The T7351 consists of a thermostat and sub base. The thermostat includes the keypad and display for 7-day programming. The sub base includes equipment control connections. The sub base mounts on the wall and the thermostat mounts to the sub base.

Typically used in buildings (including: restaurants shopping malls, office buildings and banks) under 55,000 square feet. For single zone rooftop units, split systems, heat pumps or hot/chilled water systems.

T7351 replaces T7300 thermostats and Q7300 sub bases

Accessories:

Duct Discharge Air Sensors: C7041B (6 or 12 in.), C7041C (18 in.), C7041J (12 ft averaging), C7770A (8 in. probe).

Outdoor Air Sensors: C7089A, C7170A, C7031G2014 (weatherproof).

Temperature Sensors (Remote NTC20K): C7772A, T7770A1006, T7770B1046, T7770C1044, T7770D1000, T7771.

Economizer Logic Modules: W6210, W6215, W7210, W7212, W7215, W7459.

Humidity Sensors: H7621A,B,C; H7631A,B,C.

209651A Universal Cover Plate covers marks from old thermostats and allows mounting on vertical or horizontal flush boxes. Trident white.

T7351 Thermostat				
<i>Model Number</i>	<i>Switching</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
T7351F2010/U Replaces T7300 Q7300	Conventional or Heat Pump 3H/3C	24 VAC, 50/60 Hz. Relays 1.5A @ 30 VAC	4 to 37°C	Includes sub base Replaces T7300F

Modulating Digital Temperature Controller



- **Smartronic 70 modulating controller**

This standalone microprocessor based LCD temperature controller provides proportional plus integral (P+I) and on/off temperature control. It is ideal for commercial heating, ventilating and air conditioning systems such as hydronic heating, air handling units, heat exchangers and condenser towers.

The T9275A1002 has a modulating analog 2 to 10Vdc or 4 to 20mA output and a 2A on/off output making it suitable for many control applications including cool/heat changeover, cool/heat sequence control, emergency interlocking and auto-alarming control.

Output	4-20mA or 2-10 VDC plus on/off relay 2A 24 VAC.
Control	P+I (proportional plus integral) control action provides accurate, stable and comfortable temperature control.
Accuracy	0.1 C
Adjustments	Adjustable Zero Energy Band (1.5 or 3 C), On/Off Differential (0 to 3 C in 0.5 deg. increments), Proportional Band (2 to 19 C in 1 deg increments) and Temperature Offset (-3 to +3 C in 0.5 deg increments).
Actuators	Use with series 70 direct-coupled damper actuator or valve actuators ML7420, ML7421 ML7984 & M9184D (with input card).
Display	Large back-lit LCD. Displays both set point and temperature, features user friendly interface.
Sensor	The internal sensor range is 10 to 60 C. Selectable internal or external temperature sensor. Works with all Honeywell NTC20k* remote temperature sensors. Temperature range -20 to 110 C.
Mounting	Direct wall mounting, front panel mounting and standard DIN rail mounting.
Dimensions	130 x 85 x 32mm
Wiring	Plug in terminal block.
Power	24VAC, 50/60Hz, 2VA.
Environment	0-60 C, 5-95%RH

Smartronic 70 Controller				
<i>Model Number</i>	<i>Control</i>	<i>Output</i>	<i>Range</i>	<i>Features</i>
T9275A1002	Proportional + Integral	4-20mA or 2-10 VDC plus on/off relay	10 to 60°C or -20 to 110 with remote sensor*	Fault or alarm condition digital input to shut down control loop

Modulating Thermostats



- **ZonePRO modulating thermostat**

Honeywell ZonePROTM floating and analog thermostats are designed for control of valve or damper actuators, offering a cost-effective substitute to expensive networked zoning systems. This type of thermostat is typically used in pressure-dependent variable air volume (VAV) applications, such as airport terminals or large office buildings with many zones, but can be used in any application that requires floating or analog control of an actuator.

ZonePRO thermostats have a sleek, modern design — ideal for those customers looking to upgrade the appearance and functionality of their older zoning systems. In a variety of applications, ZonePRO provides the easy installation, energy savings and control that you have come to expect from Honeywell.

Temperature Control	Microprocessor-optimized PIA
Temperature Setting	Manual — °C or °F selectable
Dimensions (HxWxD)	69 x 118 x 27 mm
Setpoint Range	10° C to 35° C
Temperature Display	0° C to 60° C
Auto Changeover Deadband	5° C
Mode Hysteresis	2° C

Remote room sensor NTC 10 K, model 50014156-002

Remote duct mount sensor NTC 10 K, model 50014157-001

TB6980 TB7980 Controller				
<i>Model Number</i>	<i>Control</i>	<i>Electrical Rating</i>	<i>Range</i>	<i>Features</i>
TB6980A1007	3 Position	24 VAC	10 to 35°C	Optional remote sensor
TB6980B1006	3 Position 0/2-10 VDC Triac	24 VAC	10 to 35°C	Optional remote sensor Analog output can be configured as a triac output
TB7980A1006	0/2-10 VDC	24 VAC	10 to 35°C	Optional remote sensor Replaces T7984A1065
TB7980B1005	2 x 0/2-10 VDC Triac	24 VAC	10 to 35°C	Optional remote sensor Second analog output can be configured as a triac output. Not suitable for applications requiring internal sensor with 2 outputs modulating heating and cooling.

Modulating Thermostats



- Microprocessor based controller for fan coil heating/cooling systems and air-conditioning terminal units. For 3-position modulating P+I control of valve actuators or damper motors.

Approvals	CE
Protection class	IP30
Remote setpoint adjustment	
Temperature setpoint range	15 ... 30 °C
Setpoint device	knob
Control output signal	3-position 24Vac, 0,3A maximum output rating Off voltage up to 2.2 Vac with no load
Temperature sensing element	PTC silicon sensor
Heating /Cooling application	Multiple control configurations including H + C programmed by DIP switches
Automatic Heat/Cool change over	seq. control
Terminal max. wire size	1,5 mm
Housing (HxWxD)	83 mm 83 mm 40 mm
Additional description	Suitable for control of up to 2 x 24Vac motors in sequence, with a 150s run-time, such as M7410C. Replaces T8078B1001

T8078 Thermostat & Accessories

Model Number	Control	Electrical Rating	Range	Features
T8078C1009	3 position	24 VAC 0.3A	15 to 30°C	Internal or remote sensor Selectable operation modes
T8109C1002				Remote sensor 1.5m cable
Q979A1020				Wall mount sensor
Q979B1029				Remote Set Point
Q979C1036				RSP with sensor
Q6360A1025				Fan speed switch. base



- Mechanical modulating room temperature controller

Wall mount 135 ohm modulating temperature controller for direct control of series 90 actuators.

It has a removable setting knob to avoid unauthorised tampering.

T921A Temperature Controllers

Model Number	Style		Range	Proportional Band
T921A1183	135 ohm		13 to 29°C	1,4°C fixed

New

Remote NTC 20K Temperature & Humidity Sensors



- Room temperature & humidity sensors, NTC20k.

The CTR21, CTR22, CTR23, and CTR24 are a family of direct wired wall modules. All models have a NTC 20K ohm nonlinear space temperature sensor. Options include, humidity, temperature setpoint adjustment, LONWORKS bus jack, override (bypass) with LED, and fan switch. For use with Excel 10, Excel 5000, Spyder Controllers or Commercial Thermostats.

Temperature range	7 to 37°C
Mounting place	internal wall
Housing dimensions	122mm H x 76.5 mm W x 22 mm D
Setpoint dial	12 to 30°C
Setpoint output	12°C = 9945 Ω, 30°C = 1150 Ω
Fan Speed Output	Fixed resistance values for Excel and Spyder controllers
Fan 3 position	auto/0/1 speed
Fan 5 position	auto/0/1/2/3 speed

TR Room Temperature & Humidity Sensor

Model Number	Application	Output	Lon Jack	
CTR21	Room Temp.	Temp. NTC 20K		
CTR21-A	Averaging Room Temp.	2 x NTC 20K = 10K ohm		
CTR21-H	Room Temperature and Humidity	Temp. NTC 20K RH selectable 0-5, 0-10 VDC or 4-20mA		
CTR21-J	Room Temp.	NTC 20K	Yes	
CTR22	Room Temp. Setpoint Dial	Temp. NTC 20K Set point	Yes	
CTR22-F5	Room Temp. Setpoint Dial Fan 5 Position	Temp. NTC 20K Set point	Yes	
CTR23	Room Temp. Setpoint Dial Override Button	Temp NTC 20K Set point	Yes	
CTR23-F3	Room Temp. Setpoint Dial Fan 3 Position Override Button	Temp. NTC 20K Set point	Yes	
CTR23-F5	Room Temp. Setpoint Dial Fan 5 Position	Temp. NTC 20K Set point	Yes	
CTR23-H	Room Temp. Humidity Setpoint Dial Override Button	Temp. NTC 20K RH selectable 0-5, 0-10 VDC or 4-20mA Set point	Yes	
CTR24	Room Temp. Override Button	NTC 20K	Yes	

Remote Temperature Sensors, NTC20k



- Water temperature sensor, NTC20k.

Protection class IP52,
Temperature range 0 ... 110°C

VF20 Water Temperature Sensor

Model Number	Mounting	Immersion Depth	Range	Features
VF20T	In pipe, copper well	135mm	0-110 deg. C	Includes copper well



- Strap on temperature sensor, NTC20k.

Protection class IP30
Temperature range 0 ... 110°C

VF20 Strap On Temperature Sensor

Model Number	Mounting	Immersion Depth	Range	
VF20A	Pipe strap	135mm	0-110 deg. C	



- Air duct temperature sensor, NTC20k.

Protection class IP65
Temperature range -40 ... 80°C

LF20-C Air Duct Temperature Sensor

Model Number	Mounting	Immersion Depth	Range	Features
LF20-C	flange	300mm	-40 to 80 deg. C	5m cable



- Water or air temperature sensor, NTC20k

Protection class IP64
Temperature range -20 ... 110°C

KFT20 Remote Water/Air Temperature Sensor

Model Number	Mounting	Dimensions	Range	Copper Well
KTF20	In pipe, copper well	6.5mm dia x 50mm L, 2M cable	-20 to 110 deg. C	Order separately, VFHT ½", 135mm insertion

Humidity & Temperature Sensors



- H7080B series duct mounting humidity and temperature sensors**

H7080B series duct mounting humidity and temperature sensors are designed for environmental monitoring and control applications in industrial, commercial buildings. Applications include discharge, or return air control.

Relative Humidity

Measurement Range: 0-100%RH

Output: 4-20mA or 0-10VDC

Accuracy: 2%, 3%, 5%RH (25°C, 20~80%RH)

5%, 9%RH (25°C, 0%~20% and 80%~100%RH)

Long Term Stability: 1%RH per year

Temp Sensor: NTC10K, NTC20K, Pt1000

Measurement Range (resistance output): 0-50°C

Measurement Range (analogue output): -10 to 40 or 0 to 70°C

Power Supply: 24 VAC $\pm 15\%$ / 24 VDC $\pm 10\%$

H7080B Humidity & Temperature Sensor

Model Number	RH Output	Accuracy	Temp. Output	Temp Range °C
C7080A3240	No	n/a	4-20mA/0-10VDC	-10 to 40
C7080A3270	No	n/a	4-20mA/0-10VDC	0 to 70
H7080B3102	4-20mA/0-10VDC	$\pm 2\%$	Pt 1000	0 to 50
H7080B3242	4-20mA/0-10VDC	$\pm 2\%$	4-20mA/0-10VDC	0 to 70
H7080B3272	4-20mA/0-10VDC	$\pm 2\%$	4-20mA/0-10VDC	-10 to 40
H7080B2103	4-20mA/0-10VDC	$\pm 3\%$	NTC 20K	0 to 50
H7080B1103	4-20mA/0-10VDC	$\pm 3\%$	NTC 10K	0 to 50
H7080B3103	4-20mA/0-10VDC	$\pm 3\%$	Pt 1000	0 to 50
H7080B3243	4-20mA/0-10VDC	$\pm 3\%$	4-20mA/0-10VDC	-10 to 40
H7080B3273	4-20mA/0-10VDC	$\pm 3\%$	4-20mA/0-10VDC	0 to 70

New



- C7080A series duct mounting temperature sensors**

The C7080A air temperature sensor is a direct wired temperature sensor that is used to sense discharge or return air in a duct. The C7080A sensor contains a temperature sensitive thermistor.

Temp sensor type NTC10K, NTC20K, Pt1000

Insertion shaft Stainless steel

Length 300mm

Diameter 14mm

Lead wire length 1000mm

C7080A Temperature Sensors

Model Number	Sensor	Accuracy	Temp Range	Features
C7080A2100	NTC20K	$\pm 0.2K$ at 25°C	0 to 50°C	60mm dia. flange
C7080A1100	NTC10K	$\pm 0.2K$ at 25°C	0 to 50°C	60mm dia. flange
C7080A3100	Pt1000	EN 60 751 Class B	0 to 50°C	60mm dia. flange

Humidity Switches



- The wall mount H6120A is for room humidity control applications.

Modern white coloured housing.
Dimensions 70 x 155 x 35mm
5 (0.2) A @ 230 VAC. IP30

Humidity Controllers

<i>Model Number</i>	<i>Style</i>	<i>Range %RH</i>	<i>Temp. Limits</i>	<i>Switching Differential</i>
H6120A1000	Room	35 to 100% RH	0 to 60 deg. C	4% RH



- The H6045A is ideal for insertion (210mm) or harsh environment applications.

15 (8)A @ 230 VAC. IP65

Humidity Controllers

<i>Model Number</i>	<i>Style</i>	<i>Range %RH</i>	<i>Temp. Limits</i>	<i>Switching Differential</i>
H6045A1002	Duct	35 to 100% RH	-10 to 65 deg. C	5% RH



- Wall mount humidistat, vertical or horizontal mount.

Tamper resistant set point adjustment (using setting tool)
Dehumidifier 6 (3.8) A @ 240 VAC
Humidifier 6 (2.2) A @ 240 VAC

Humidity Controller

<i>Model Number</i>	<i>Style</i>	<i>Range</i>	<i>Temp. Limits</i>	<i>Switching Differential</i>
H600A1014	Room	20 to 80% RH	10 to 52 deg. C	4% RH

Carbon Dioxide Gas Sensors



- The C7632A is a stand-alone carbon dioxide (CO₂) room sensor for use in heating ventilation and air conditioning (HVAC) systems.

Features

Non-Dispersion-Infrared (NDIR) technology used to measure carbon dioxide gas.

Gold-plated sensor provides long-term calibration stability.

Device provides voltage output based on CO₂ levels.

Used for CO₂ based ventilation control.

Automatic Background Calibration (ABC) algorithm based on long-term evaluation reduces required typical zero-drift check maintenance.

Fixed 0 to 10 Vdc from 0 to 2000 ppm. No adjustments are necessary.

Dimensions: 103 x 99 x 30 mm (H x W x D)

Power supply 24 VAC

CO ₂ Sensor				
Model Number	Style	Range	Output	Features
C7632A1004	Room	0 to 2000 ppm	0-10 VDC	Attractive housing



- The C7632B is a stand-alone carbon dioxide (CO₂) duct sensor for use in heating ventilation and air conditioning (HVAC) systems.

Features

Non-Dispersion-Infrared (NDIR) technology used to measure carbon dioxide gas.

Gold-plated sensor provides long-term calibration stability.

Device provides voltage output based on CO₂ levels.

Used for CO₂ based ventilation control.

Automatic Background Calibration (ABC) algorithm based on long-term evaluation reduces required typical zero-drift check maintenance.

Fixed 0 to 10 Vdc from 0 to 2000 ppm. No adjustments are necessary.

Housing dimensions: 142 x 84 x 46 mm (H x W x D)

Power supply 24 VAC

CO ₂ Sensor				
Model Number	Style	Range	Output	Features
C7632B1002	Duct	0 to 2000 ppm	0-10 VDC	203mm duct insertion depth

E³ Gas Sensors



- **E3Point Toxic and Combustible Gas Detector Standalone Platform (Single or Dual-Gas Monitoring)**

The E3Point is a wall or duct-mounted gas detector for gas monitoring and alarming. It is used as a standalone device with single-gas or dual-gas monitoring with remote sensor. E3Point standalone version replaces Vulcain models VA201T, VA201M and VA301M.

Gas Range

CO (Carbon monoxide) 0-250 ppm	Alarms at 25 ppm 200 ppm 225 ppm
H ₂ S (Hydrogen sulfide) 0-50 ppm	Alarms at 10 ppm 15 ppm 20 ppm
NO ₂ (Nitrogen dioxide) 0-10 ppm	Alarms at 0.7 ppm 2 ppm 9 ppm
O ₂ (Oxygen) 0-25% vol.	Alarms at 19.5% vol. 22% vol. 22.5% vol
H ₂ (Hydrogen) LEL 0-100%	Alarms at LEL 25% 50% 90%
CH ₄ (Methane) LEL 0-100%	Alarms at LEL 25% 50% 90%
C ₃ H ₈ (Propane) LEL 0-100%	Alarms at LEL 25% 50% 90%

Power supply 24 VAC/DC

The remote sensor and main wall mount gas detector are shown in the picture above. Contact your Honeywell distributor for remote sensor and networking options.

E3 Gas Sensor				
<i>Model Number</i>	<i>Description</i>	<i>Range</i>	<i>Output</i>	<i>Features</i>
E3SASCO	Wall Mount Standalone	CO 0-250 ppm	4-20mA 3 Alarms	Fitted with CO cartridge
E3DASCO	Duct	CO 0-250 ppm	4-20mA 3 Alarms	Fitted with CO cartridge
E3SA	Wall Mount Standalone	Order separate gas cartridge	4-20mA 3 Alarms	Without cartridge
E3DA	Duct	Order separate gas cartridge	4-20mA 3 Alarms	Without cartridge
E3SCO	CO Cartridge	0-250 ppm		
E3NO ₂	NO ₂ Cartridge	0-10 ppm		
E3H ₂ S	H ₂ S Cartridge	0-50 ppm		
E3H ₂	H ₂ Cartridge	0-100% LEL		
E3O ₂	O ₂ Cartridge	0-25% vol.		
E3M	CH ₄ Cartridge	0-100% LEL		
E3P	C ₃ H ₈ Cartridge	0-100% LEL		

Sensepoint XCD Gas Sensors



- **Sensepoint XCD Flammable, toxic and oxygen deficiency gas detector using catalytic, electrochemical cell and infrared sensors**

The Sensepoint XCD (exceed) range of fixed gas detectors is used to monitor areas where flammable, oxygen deficiency and toxic gases may pose a hazard to working environments. XCD offers high performance and reliability and is designed for a broad spectrum of industrial applications with a comprehensive choice of features and benefits in a truly cost effective package.

This advanced and versatile range of gas detectors monitors and indicates the presence of any one of a selection of toxic and flammable gases. Any user can instantly identify the operating status of XCD via its clear multi-colour backlit display. Output signals available are industrial standard 4 to 20mA, three relay contacts and MODBUS digital.

A Sensepoint XCD includes Transmitter, Sensor socket, Sensor cartridge, Standard weather protection, Magnetic wand and Allen key.

Stainless steel housings are available upon request.

Special Flammable Gas Calibration available upon request.

ATEX/IECEX/CHINA APPROVAL (Epoxy Coated Aluminium Alloy, LM25)

Output	3 wire 4-20mA, 3 x SDPT 250 VAC 5Amp. Prog. Alarms
Communication	RS485 Modbus RTU (optional)
Power Supply	24 VDC (16 to 32 VDC)

Accessories

S3KCAL	Calibration cap
SPXCDCC	Collecting cone for use with lighter than air gases
SPXCDDMK	Duct mounting kit
SPXCDDMTBR	Mounting bracket (inc. bolts, nuts, brackets)
SPXCSDP	Sunshade / Deluge Protection

Sensepoint XCD Gas Sensors

Model Number	Gas	Default Range (Full Scale)	Output	Features
SPXCDALMFX	Flammable Catalytic	0-100%LEL (20,0 to 100.0%LEL)	4-20mA 3 Alarms	Green Amber Red LCD status indication
SPXCDALMRX	CH4 (Methane) IR	0-100%LEL (20,0 to 100.0%LEL)	4-20mA 3 Alarms	As above
SPXCDALMO1	Oxygen	25.0%/Vol	4-20mA 3 Alarms	As above
SPXCDALMHX	Hydrogen Sulphide	0-50ppm (10.0 to 100.0ppm)	4-20mA 3 Alarms	As above
SPXCDALMCX	CO (Carbon Monoxide)	0-500ppm (100 to 1000ppm)	4-20mA 3 Alarms	As above
SPXCDALMG1	Hydrogen	0-1000ppm	4-20mA 3 Alarms	As above
SPXCDALMB1	CO2(Carbon Dioxide)	IR 0-2%VOL	4-20mA 3 Alarms	As above

Pressure & Vacuum Switches



- **Compact heavy duty pressure switch for non-aggressive liquid and gaseous media.**

Ranges from 0-0.25 to 0-63 bar are available.

Dicast aluminium housing with stainless steel diaphragm.

Process connection, 1/2" male and 1/4" female BSP thread.

SPDT switch, 8 (5) A @ 250 VAC

Pressure Switches

<i>Model Number</i>	<i>Sealing</i>	<i>Range</i>	<i>Differential</i>	<i>Max. Pressure</i>
DCMV10	IP54	1-10 bar (14.5 to 145 PSI)	0.5-2.8 bar	25 bar
DCMV25	IP54	1-25 bar (14.5 to 362 PSI)	1.3-6 bar	60 bar



- **Pressuretrol's provides on/off or modulating control for steam, air , non-combustible gasses and non-corrosive fluid applications.**

For indoor dry environments.

Process connection is a 1/4"NPT female thread.

SPDT micro switch mechanism 5A @240 VAC.

Or 135 ohm series 90 modulating control for use with Modutrol Motor actuators such as M9184, M9185 & M9194E.

Optional siphon loop order separately, connections 1/4"-18 NPT threads, model 14026 steel & 50024585-001 brass.

Pressuretrol

<i>Model Number</i>	<i>Control</i>	<i>Range</i>	<i>Differential</i>	<i>Max. Pressure</i>
L404F1060	SPDT	2 to 15 PSI	2 to 6 PSI	25 PSI
L404F1078	SPDT	5 to 50 PSI	6 to 14 PSI	85 PSI
L404F1102	SPDT	10 to 150 PSI	10 to 22 PSI	225 PSI
L404F1094	SPDT	20 to 300 PSI	20 to 50 PSI	350 PSI
L91B1050	135 ohm	10 to 150 PSI	5 to 23 PSI	225 PSI
L91B1068	135 ohm	20 to 300 PSI	28 to 110 PSI	325 PSI



- **Compact heavy-duty vacuum switch.**

Dicast aluminium housing.

Process connection, 1/2" male and 1/4" female BSP thread.

SPDT switch, 8 (5) A @ 250 VAC

Vacuum Switch

<i>Model Number</i>	<i>Sealing</i>	<i>Range</i>	<i>Differential</i>	<i>Max. Pressure</i>
VCM101	IP54	-1 to +0.1 bar	0.045 bar	3 bar

New

Pressure Transmitters



- **Smart SN Pressure transmitter for gas and liquid**

Electronic Pressure Transmitters are microprocessor-controlled pressure measurement devices for relative pressures from -1 to +1 bar to 0 to 40 bar. They are suitable for an extremely wide range of applications, including the precision recording and monitoring of system pressure. The Optional LCD graphical display can be swivelled for better readability and the LCD rotated in 90° steps by the field configuration tool software.

Features:

Protection class	IP67 without display, IP65 with display
Attenuation filter	Adjustable
Media temperature	-20 to 80°C
Ambient temperature	-20 to 80°C without display, -20 to 70°C with display
Power supply	18 to 35 Vdc
Field configuration tool	Order separately model CFT1
Pressure ranges	-1 to 1, 0 to 1, 4, 10, 16, 25 & 40 bar

Smart SN Pressure Transmitters

Model Number	Range	Max. Pressure	Wiring	Display
PTSRB0101A2	0-10 bar	30 bar	2 wire 4-20mA	No
PTHRB0101A2	0-10 bar	30 bar	2 wire 4-20mA	Yes

New

- **Electronic P7620A industrial pressure transmitters**

The P7620A industrial pressure transmitters have a rugged 304 stainless steel housing. They are ideal for general purpose commercial and industrial applications.

Features:

Temperature compensated
 High level 2 wire 4-20mA or 3 wire 0-10VDC output options
 EMI/RFI protected
 Compact construction
 Shock and vibration resistance
 Zero and span adjustments

Protection class	IP65
Media temperature	-25 ... 85°C
Ambient temperature	0 to 70°C
Power supply	10 to 32 Vdc
Pressure connection	Optional R 1/4" or 1/2" NPT
Pressure ranges	-1 to 0, 0 to 1, 2, 4, 6, 10, 16, 20, 25 & 40 bar

P7620 Pressure Transmitters

Model Number	Range	Max. Pressure	Wiring	Connection
P7620A1012A1	0-10 bar	20 bar	2 wire 4-20mA	R 1/4"
P7620A1012A2	0-10 bar	20 bar	2 wire 4-20mA	1/2" NPT

Contact your Honeywell distributor for a full model selection guide.

Differential Pressure Switches For Air



- Low cost for OEM applications

Used in forced air systems to activate auxiliary equipment when an airflow is established.

C6065 Differential Pressure Switches

Model Number	Description	Electrical Rating	Range	Features
C6065A1028:2	Diff Press Switch	1.5A @ 240VAC	4 to 10mm wc	Silver contacts. SPDT
C6065F1183	Diff Press Switch	1.5A @ 240VAC	10 to 40 mm wc	Silver contacts. SPDT



- Filter monitor or flow switch for air, non-combustible, non aggressive gases in air conditioning and ventilating installations

Pressure connection	plastic connection piece for 5 mm (internal) hose
Wiring connection	AMP connector and screw terminals
Protection class	IP54
Materials	plastic housing, silicone sensing element
Media temperature	-20 ... 85 °C
Switch function/capacity	SPDT switch; capacity 0,4 A inductive, 1,5 A resistive
Allowable maximum pressure	5000 Pa

Additional description Accessories supplied with pressure switch: 2 m silicon hose, 2 connection pieces with mounting screws, 2 self tapping screws for mounting on housing, 3 screw terminals for electrical connection.

DPS Differential Pressure Switch

Model Number	Description	Electrical Rating	Range	Features
DPS200	Diff Press Switch	1.5A @ 240VAC	20-200 Pa (2 to 20mm wc)	Supplied with tubing & mounting screws
DPS400	Diff Press Switch	1.5A @ 240VAC	40-400 Pa (4 to 40mm wc)	As above
DPS500	Diff Press Switch	1.5A @ 240VAC	50-500 Pa (5 to 50mm wc)	As above
DPS1000	Diff Press Switch	1.5A @ 240VAC	200-1000 Pa (20 to 100mm wc)	As above
DPS2500	Diff Press Switch	1.5A @ 240VAC	500-2500 Pa (50 to 250mm wc)	As above

Differential Pressure Switch For Water or Air



Differential pressure switch for water or air. Opens or closes the switch contact in response to a change in sensed differential pressure. Suitable for pump & filter applications.

Maximum working pressure	150 PSI at either port.
Burst pressure	300 PSI
Repeatability	1% of span
Electrical	5 (3) A @ 250 VAC
Gold clad silver contacts	1mA @ 24VDC
Ambient temp.	-1.1 to 71.1 C
Media temp.	93 C @ 100 PSI
Dead band	1 PSI
Housing	NEMA 1
Connection	¼ NPT

Differential Pressure Switch				
<i>Model Number</i>	<i>Description</i>	<i>Switch</i>	<i>Adj. DP Range</i>	<i>Features</i>
UEC24014M262	Diff Press Switch	SPDT	4 to 43.5 PSI on pressure rise 5.5 to 45 PSI on pressure fall	Water or air

Differential Pressure Transmitter For Air



Double range differential pressure transmitter for air conditioning & ventilation. For filters, fans, blowers, air flow control, and environmental protection.

Pressure connection	6mm hose pipe
Wiring connection	screw terminal block for wire up to 1,5mm ²
Protection class	IP54
Materials	ABS and POM
Media temperature	0 ... 50 °C
Power supply	18 to 30 VAC/DC
Output	3 wire 0-10 VDC or 4-20 mA
Additional description	Duct Kit DPSK included with 2 m of tubing. Adjustable by jumper to the next higher pressure range.

DPTM Differential Pressure Transmitter				
<i>Model Number</i>	<i>Range Pa</i>	<i>Output</i>	<i>Max Pressure Kpa</i>	<i>Features</i>
DPTM50	-50 to 50	0-10 VDC or 4-20 mA	20	
DPTM110	-100 to 100	0-10 VDC or 4-20 mA	20	
DPTM100	0 to 100/250	0-10 VDC or 4-20 mA	20	Dual range
DPTM250	0 to 250/500	0-10 VDC or 4-20 mA	20	Dual range
DPTM500	0 to 500/1000	0-10 VDC or 4-20 mA	20	Dual range
DPTM1000	0 to 1000/2500	0-10 VDC or 4-20 mA	40	Dual range
DPTM5000	0 to 5000/10000	0-10 VDC or 4-20 mA	60	Dual range

Flow Switches



- **Liquid flow switch for industrial and HVAC applications.**

Protection class IP65
 Switch function/capacity SPDT, capacity 250Vac, (8)15 A
 Setpoint device screw

Additional description For liquid flow, also suitable for oil, cooling circuits and lubrication systems; pipe connection is 1 in. BSP. Suitable for pipe sizes 1 to 8 in. Max temp 120 deg. C.

S6065 Flow Switches

Model Number	Description	Pipe connection	Max Pressure	Features
S6065A1003	Paddle type flow switch	1" BSP	11 bar	Replaces McD.M. FS4-3J, FS8-WJ
S6065A2001	Paddle type flow switch	1" BSP	30 bar	Stainless steel wetted parts



- **Air flow sail switches.**

Used in forced air systems to activate auxiliary equipment when an airflow is established. S688A (left) uses a polyester sail, attached to a micro switch. 254mm insertion depth. Replacement sail model 123773A.

The S6040 (right) mounts vertically through a 20mm hole in the duct. Mount the sail inside. Sail dimensions are 80 x 175mm, 200mm insertion depth

Sail Switches

Model Number	Sail Material	Electrical Rating	Range	Max Temp
S688A1007	Polyester	2.5A Resistive 240VAC	On at 1.3 m/s Off at 0.4 m/s	52 C
S6040A1003	Metal (brass)	15(8)A 250 VAC	Adj. 2.5 to 9 m/s Approx 1.5 m/s differential	85 C

- **Solid state electronic flow switch for pipes or ducts, in liquid & air applications.**



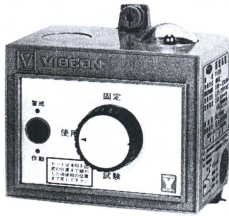
Protection class IP65
 Switch function/capacity SPDT, capacity 250 Vac, 10(2) A
 Setpoint device inside
 Max. media temperature 80 °C

Additional description LED's available for indication of power supply and switch status. 230 VAC power required

Solid State Flow Switches

Model Number	Flow Range	Pipe connection	Max Pressure	Features
KSW-230	0.05 to 3 m/s for air or liquid	½ in.	30 bar	45mm immersion
KSL-230	0.1 to 30 m/s for air	PG7 plus mounting flange	10 bar	130mm insertion

Vibcon Earthquake Switch



- The Vibcon V-725 senses shocks caused by earthquakes. It consists of a simple magnetic switch that is activated by the low frequency vibrations caused by seismic shocks. This can be wired to shut down critical pieces of plant such as burners and boilers to prevent fire or further damage.

Approval	Tokyo City Fire Defence Agency
Wave cycle range	0.1 to 1 second
Acceleration	100-170 Galileo, 1.0 to 1.7 m/sec ²
Mounting	surface with integral leveling ball
Switch	SPST 15 (6) A @ 250 VAC
Dimensions	180w x 107h x 75d mm
Features	Dial test position Coloured Indicator No power or batteries required to operate. Includes levelling ball for correct positioning

Vibcon Earthquake Switch				
<i>Model Number</i>	<i>Description</i>	<i>Range</i>		<i>Features</i>
V-725	Earthquake switch	100-170 gal		No power required Voltage free contact

Modutrol Motors



- Modutrol valve & damper actuators**

Reversing, proportional motors used to drive burner firing rate valves, globe valves, dampers and auxiliary equipment.

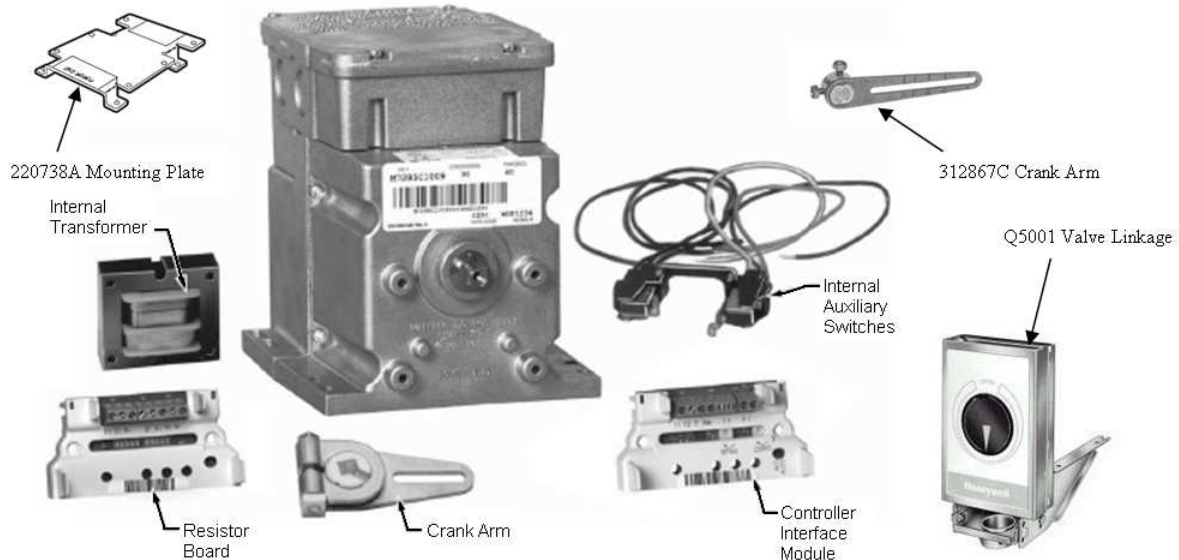
Options include: spring return, internal auxiliary switches, internal transformers and input signal adapters.

All Modutrol motors require a 24 VAC supply with an isolating transformer. 120 VAC models have a field removable transformer allowing the motor to work directly from a 24 VAC supply.

See over page for wide range of accessories.

Modutrol Motors				
<i>Model Number</i>	<i>Input Type</i>	<i>Rotation</i>	<i>Timing</i>	<i>Features</i>
M6184D1035	Floating or 2 Position	Adjustable between 90 to 160°	30 or 60 sec	150 lbin (17 Nm) torque
M6284D1032-F <i>Replaces M6284D1000</i>	Floating or 2 Position Inc. linear 10K feedback pot.	Adjustable between 90 to 160°	30 or 60 sec	150 lbin (17 Nm) torque
M6285F1001-F <i>Replaces M6285A1005</i>	Floating or 2 Position Inc. 10K linear feedback pot.	Adjustable between 90 to 160°	30 or 60 sec	Spring return. 60 lbin (6.8 Nm) For Slave applications use M6285A1005-S
M6294D1008-S/U	Floating or 2 Position Non-linear feedback pot.	Adjustable between 90 to 160°	2 or 4 minutes	300 lbin (34 Nm) torque
M9484D1010 <i>Replaces M9184D1013 M9184D1021</i>	135 ohm or 4-20mA with input card adapter	Adjustable between 90 to 160°	30 or 60 sec	150 lbin (17 Nm) torque
M9185D1004	135 ohm or 4-20mA with input card adapter	Adjustable between 90 to 160°	30 or 60 sec	Spring return. 60 lbin (6.8 Nm) torque
M9194E1000	135 ohm or 4-20mA with input card adapter	Adjustable between 90 to 160°	2 or 4 minutes	300 lbin (34 Nm) torque
M7284Q1009 <i>Replaces M7284Q1017</i>	4-20mA	Series 2 only Adj. 90 or 160°	30 or 60 sec	150 lbin (17 Nm) Removable 120VAC transformer 2 x aux switches

Modutrol Motor Accessories



Modutrol Accessories

Model Number	Description	Range	Features
50017460-001	Internal isolating transformer Use for new Modutrol IV Series 2	240/110/24 to 24VAC	Mounts easily inside Modutrol
198162AA	Internal transformer Use for older Modutrol IV Series 1	240 / 110 to 24VAC	Series 1 Modutrols were phased out June 2006
Q7230A1005	Controller interface module for M9*** series to accept current or voltage inputs	4 to 20 mA or 2 to 10 VDC	Adj. zero and span Mounts easily inside Modutrol
221508A2	Resistor board to allow 4 to 20mA input or unison control of M9***	4 to 20 mA	Dip switch selection. Mounts easily inside Modutrol
220736B	Dual Auxiliary switches internally mounted		2 x SPDT switches adjustable cams
Q607D1008	Dual Auxiliary switches externally mounted, requires 220738A/U adapter plate		Mounts on Modutrol auxiliary shaft
221455A	Crank arm for Series IV Modutrols		Adjustable
4074ELR	Heavy duty crank arm for 34Nm Modutrols		
312867C	Long slotted arm for damper or valve applications		25 to 120mm adjustment radius
315321	Ball joint For coupling to dampers and butterfly valves		Suitable for 1/4" rods
Q5001D1018	Linkage for globe control valves 160 or 320 lb	20mm stroke	For V5011, V5013, V5328 V5329 etc
4074ERU	Weatherproof seal kit includes gaskets, shaft seal & grease capsule		Protection against driving rain when the motor is mounted on any axis
220738A/U	Adapter mounting plate For replacing Series III Motors		Lifts shaft 19mm
203709D/U	Screw terminal adapter		

Direct Coupled Actuators

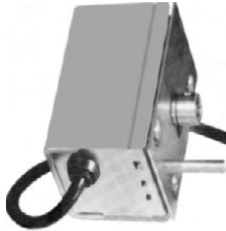


- **Non-spring return low cost actuators for zoning applications**

Zone damper actuators for direct mount to domestic butterfly/barrel or splitter box dampers. Drive Open/ Drive Closed (Non-Spring return). Electrical Connection: 1 Metre Cable attached.

DA02 Zone Damper Actuators

<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Stroke Time Sec</i>
DA0211A	3 position	24 VAC	1.5 Nm	24



- **Spring return actuators for zoning applications**

Zone damper actuators for direct mount to domestic butterfly/barrel or splitter box dampers. Drive open, spring return. Electrical Connection: 1 Metre Cable attached. M447C- gold coloured casing, M847 - silver coloured casing.

DA02 Zone Damper Actuators

<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Stroke Time Sec</i>
M447B1005	2 position Spring return	230 VAC	0.34 Nm	27 open 25 closed
M447C1004	2 position Spring return	230 VAC	0.5 Nm	38 open 25 closed
M847B1014	2 position Spring return	24 VAC	0.34 Nm	27 open 25 closed

Direct Coupled Actuators



- Smartact low torque damper actuators**

Used to control building HVAC dampers. Suitable for use with 2 position, SPDT floating, and 0/2 to 10 Vdc, electronic modulating controllers. 90 deg. 90 second stroke.

External auxiliary switches 2 x SPDT model number SSW2.

Smartact Series DCA Actuators 5 & 10 Nm				
<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Features</i>
N05230-2POS	2 position	230 VAC	5 Nm	
CN6105A1011	2 or 3 position	24 VAC	5 Nm	
CN7505A2001	0/2-10 VDC Or 2/3 position	24 VAC	5 Nm	0/2-10VDC feedback
N10230-2POS	2 position	230 VAC	10 Nm	
CN6110A1003	2 or 3 position	24 VAC	10 Nm	
CN6110A1201	2 or 3 position	24 VAC	10 Nm	2 internal aux. switch
CN7510A2001	0/2-10 VDC Or 2/3 position	24 VAC	10 Nm	0/2-10VDC feedback
CN7510A2209	0/2-10 VDC Or 2/3 position	24 VAC	10 Nm	0/2-10VDC feedback 2 internal aux. sw.



- Smartact high torque damper actuators**

Used to control building HVAC dampers. Suitable for use with spdt floating, and 0/2 to 10 Vdc, electronic modulating controllers. 90 deg. stroke. Stroke time 110 seconds.

Auxiliary switches 2 x SPDT model number SW2
 CN4620A1001 replaces ML6684E1008, N20230
 CN7220A2007 replaces ML7284E1006, N20010

Smartact Series DCA Actuators 20 & 34 Nm				
<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Features</i>
CN4620A1001	Floating or 2 position	230 VAC	20 Nm	
CN6120A1002	Floating or 2 position	24 VAC	20 Nm	
CN7220A2007	0/2-10 VDC Or 4-20mA	24 VAC or DC	20 Nm	0/2-10VDC feedback
CN4634A1001	Floating or 2 position	230 VAC	34 Nm	
CN6134A1003	Floating or 2 position	24 VAC	34 Nm	
CN7234A2008	0/2-10 VDC Or 4-20mA	24 VAC or DC	34 Nm	0/2-10VDC feedback

Spring Return Actuators



- Zelix compact spring return actuators**

The new Honeywell Zelix™ Spring-Return Low-Torque direct-coupled actuator is light and compact, yet delivers torque at 3 or 5 Nm. The Zelix gives you the power without the waste. From the adjustable end switch to the self centering shaft to Honeywell's exclusive mode selector.

Features

Reversible mounting

Models with end switch, 1 x SPDT adjustable 0-95° nominal stroke

Timing, 2 position 45 sec. modulating 90 sec.

Spring return, less than 25 seconds (-20°C to 55°C)

Dimensions, W98 x D80 x H177mm

Environmental protection, IP54

Zelix Compact Spring Return DCA Actuators 3 & 5 Nm

<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Features</i>
MS4103A1030/U	2 position	230 VAC	3 Nm	
MS4103A1130/U	2 position	230 VAC	3 Nm	1 aux. switch
MS8103A1030/U	2 position	24 VAC or DC	3 Nm	
MS8103A1130/U	2 position	24 VAC or DC	3 Nm	1 aux. switch
MS7503A2030/U	0/2-10 VDC or Floating	24 VAC or DC	3 Nm	
MS7503A2130/U	0/2-10 VDC or Floating	24 VAC or DC	3 Nm	1 aux. switch
MS4105A1030/U	2 position	230 VAC	5 Nm	
MS4105A1130/U	2 position	230 VAC	5 Nm	1 aux. switch
MS8105A1030/U	2 position	24 VAC or DC	5 Nm	
MS8105A1130/U	2 position	24 VAC or DC	5 Nm	1 aux. switch
MS7505A2030/U	0/2-10 VDC or Floating	24 VAC or DC	5 Nm	
MS7505A2130/U	0/2-10 Vdc or Floating	24 VAC or DC	5 Nm	1 aux. switch

Spring Return Actuators



- **Spring return actuators**

The CS series Spring Return Direct Coupled Actuators (DCA) are used within heating, ventilating, and air-conditioning (HVAC) systems. They can drive a variety of quarter-turn, final control elements requiring spring return failsafe operation.

Features

Reversible mounting

Plenum-rated per UL873

Brushless DC submotor with electronic stall protection for floating/modulating models.

Timing, 2 position 45 sec. \pm 5 sec. modulating 90 sec.

Spring return, nominal 20 seconds (-20°C to 55°C)

Models with end switches, 2 x SPDT:

Settings (fixed): 7° nominal stroke, 85° nominal stroke.

Dimensions W100 x D75 x H247mm

Spring Return DCA Actuators 5, 10 & 20 Nm

<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Features</i>
CS4105A1002	2 position	100-250 VAC	5 Nm	
CS8105A1008	2 position	24 VAC or DC	5 Nm	
CS7505A2008	0/2-10 VDC or Floating	24 VAC or DC	5 Nm	Voltage feedback
CS4110A1002	2 position	100-250 VAC	10 Nm	
CS4110A1200	2 position	100-250 VAC	10 Nm	2 end switches
CS8110A1008	2 position	24 VAC or DC	10 Nm	
CS8110A1206	2 position	24 VAC or DC	10 Nm	2 end switches
CS7510A2008	0/2-10 VDC or Floating	24 VAC or DC	10 Nm	Voltage feedback
CS7510A2206	0/2-10 VDC or Floating	24 VAC or DC	10 Nm	Voltage feedback 2 end switches
CS7510H2209	0/2-10 VDC or Floating	24 VAC or DC	10 Nm	Adj. zero & span Voltage feedback 2 end switches
CS4120A1001	2 position	100-250 VAC	20 Nm	
CS4120A1209	2 position	100-250 VAC	20 Nm	2 end switches
CS8120A1007	2 position	24 VAC or DC	20 Nm	
CS8120A1205	2 position	24 VAC or DC	20 Nm	2 end switches
CS7520A2007	0/2-10 VDC or Floating	24 VAC or DC	20 Nm	Voltage feedback
CS7520A2205	0/2-10 VDC or Floating	24 VAC or DC	20 Nm	Voltage feedback 2 end switches
CS7520H2208	0/2-10 VDC or Floating	24 VAC or DC	20 Nm	Adj. zero & span Voltage feedback 2 end switches

Spring Return Actuators Fire & Smoke



- **Fast-Acting, Two-Position Actuators ,spring return for Fire & Smoke dampers**

Direct coupled actuators (DCA) for on/off damper control. The actuator accepts an on/off signal from a single-pole, single throw (spst) controller. Reversible mounting allows actuator to be used for either clockwise (cw) or counterclockwise (ccw) spring rotation.

The MS4120F, MS4620F, and MS8120F DCA are designed to operate reliably in smoke control systems requiring Underwriters Laboratories Inc. UL555S ratings up to 176 ° C or 350°F. Order mounting bracket separately model 205649.

Fire & Smoke Spring Return Actuators				
<i>Model Number</i>	<i>Input Signal</i>	<i>Supply</i>	<i>Torque</i>	<i>Stroke Time Sec</i>
MS4620F1005	On/off switch 230 VAC	230 VAC	20 Nm	15 sec spring return
MS8120F1002	On/off switch 24 VAC	24 VAC	20 Nm	15 sec spring return

Valve Actuators (Large Valves 15 to 150mm)

- **Direct coupled valve actuators**



Accurate valve positioning.
Quick and easy installation.
No separate linkage required
No adjustments required.
High close off ratings, 600 and 1800 Newton options.
Manual operation on non-spring return models.
Force limiting end switches.
24 VAC supply, select AT72DMHL 24 VAC surface mount transformer.
Use on V5011, V5013, V5328, V5329 valves etc with 38mm bonnets
Circuit boards ML7421A model K43196192-003, ML6421 model K43196130-001
Replacement yoke for ML7421A/ML6421A model K43191038-001

ML Series Actuators

<i>Model Number</i>	<i>Input Signal</i>	<i>Stroke</i>	<i>Force</i>	<i>Features</i>
ML6420A3007-E	Floating or 2 position	20mm	600N	1 minute timing
ML6425A3006	Floating or 2 position	20mm	600N	Spring return 1.8 minute timing
ML6421A3005	Floating or 2 position	20mm	1800N	1.9 minute timing
ML6421B3004	Floating or 2 position	38mm	1800N	3.5 minute timing
ML7420A8088-E	0-10 VDC or 2 to 10 VDC	20mm	600N	1 minute timing
ML7425A8018-E	0-10 VDC or 2 to 10 VDC	20mm	600N	Spring return 1.8 minute timing
ML7421A1032-E	4-20mA or 2 to 10 VDC	20mm	1800N	1.9 minute timing
ML7421B1023-E	4-20mA or 2 to 10 VDC	38mm	1800N	3.5 minute timing

- **Low cost direct coupled valve actuators**



Linear motorized actuator that mounts directly onto V5011 two-way or V5013 three-way valves and provides up to 19 mm (3/4") of linear travel (stem lift).
ML7984 is for use with Series 70 2-10Vdc, 4-20mA electronic and Series 90 135 ohm. ML6984 is for 3 position floating control applications. Power supply 24 VAC/DC.

Options:
Auxiliary switch (1 x SPDT) model 272630A,
Position feedback 2-10 VDC plus relay board (1 x SPDT) model 272630D

ML Series Actuators

<i>Model Number</i>	<i>Input Signal</i>	<i>Stroke</i>	<i>Force</i>	<i>Features</i>
ML7984A4009	4-20mA, 2-10 VDC 135 ohm Series 90	13-25mm self adjusting	710N	63 sec. timing
ML6984A4000	3 position	13-25mm self adjusting	710 N	63 sec. timing

Large Control Valves, 2 Way



- **For heating, ventilating and air conditioning; hot/cold water and steam**

V5011S/R	2-way valve 15 to 50mm (S for steam/water, R for water only)
Materials	stem stainless steel, body red brass
Plug	V5011S stainless steel, V5011R brass
Action	stem extension opens valve
Stroke	20 mm
Media temperature	2 to 120°C 16 bar, 2 to 170°C 14.9 bar
Steam pressure	V5011S 6.9 bar max.
Static pressure	16 bar
Port connection type	internal threads ISO228 (BSP)
Flow char	equal percentage
See valve selection matrix for full model numbers and recommended actuator.	



- **For heating, ventilating and air conditioning; hot/cold water and steam**

V5328A	2-way valve 15 to 80mm, select V5049 for 100 to 150mm
Materials	body cast iron GG25, trim stainless steel
Action	stem extension opens valve
Stroke	20 mm
Media temperature	2..120 C 16 bar, 120..150 C 14 bar, 150..170 C 13.7 bar
Steam pressure	6.9 bar max.
Static pressure	16 bar
Port connection type	flanges ISO7005
Port	PN16 flange
Flow char.	equal percentage
See valve selection matrix for full model numbers and recommended actuator.	



- **Pressure balanced , high close off pressure for heating, ventilating and air conditioning; hot/cold water and steam**

V5016A	2-way valve 15 to 150mm
Materials body	nodular iron GGG40.3, trim stainless steel
Action	stem extension opens valve
Close off pressure	600N motor 1600 kPa
Media temperature	2 ... 180 °C, max 16 bar (max. 9 bar steam)
Static pressure	16 bar
Port connection type	flanges ISO7005-2, PN16
Flow char.	Equal percentage.
See valve selection matrix for full model numbers and recommended actuator.	



- **Pressure balanced , high close off pressure for heating, ventilating and air conditioning; hot/cold water and steam**

V5025A	2-way valve 15 to 150mm
Materials	body cast steel GGG40.3, trim stainless steel
Action	stem up opens valve
Close off pressure	2500 kPa, 600 N motor 15 to 80mm, 1800 N mtr. 100 to 150mm
Media temperature	2 ... 200 °C, max 20 bar (max. 14.5 bar steam)
Static pressure	25 bar
Port connection type	flanges ISO7005-2, PN25
Flow char.	equal percentage
High temp. extension	MP953 actuators, use 43161276-001 valve size 15 to 80mm
See valve selection matrix for full model numbers and recommended actuator.	

Large Control Valves, 3 Way



- For heating, ventilating and air conditioning, domestic hot water, open circuits; hot/cold water

V5013R	3-way mixing valve 15 to 50mm
Materials	body red brass, stem stainless steel, plug brass
Action	stem down opens A-AB
Stroke	20 mm
Media temperature	2 ... 170 °C
Static pressure	16 bar
Port connection type	internal threads ISO228 (BSP)
Flow char.	A-AB equal percentage
Flow char.	B-AB linear

See valve selection matrix for full model numbers and recommended actuator.



- For heating and air conditioning; hot/cold water

V5329A,C	3-way mixing valve 15 to 80mm Select V5015 (PN6) or V5050A (PN16) for 100 to 150mm
Materials	body cast iron GG25, trim stainless steel
Action	stem retraction opens A-AB
Stroke	20mm
Static pressure	V5329C 6 bar, V5329A 16 bar
Port connection type	flanges ISO7005, V5329C PN6/ V5329A PN16
Flow char.	A-AB equal percentage
Flow char.	B-AB linear

See valve selection matrix for full model numbers and recommended actuator.



- For heating systems, hot & cold water

V5050A	3-way mixing valve; V5050B-models diverting
Materials	body cast steel GS-C25, trim stainless steel
Action	stem retraction opens A-AB
Stroke	20mm (100mm valve 38mm)
Media temperature	2 ... 220 °C
Static pressure	25/40 bar
Port connection type	flanges ISO7005 PN25/40
Flow char.	linear

See valve selection matrix for full model numbers and recommended actuator.

Large Valve Selection Matrix

Select a Honeywell globe valve with the valve selection matrix.

1. Look along the top row. Select if you want 2 way or 3 way, screwed or flanged and the body pressure rating PN16 (16 bar) or PN25 (25 bar)
2. Look down the column to match the size you want. (If unsure contact your Honeywell distributor for sizing help. You should provide flow rate and pressure drop information.)
3. Check the Kvs factor and close off pressure (bar) matches your requirements.
4. Note down the valve model number and the close off force eg V5328A1054 1800N.

Select the actuator

1. Go to the actuator selection table below. Select the type of control you need and the close off force.
2. Note special requirements such as spring return or 38mm stroke (20mm is standard).
3. Select high temperature extension if required.

Valve Selection

Size	2 way PN16 BSP Screwed V5011S, V5011R V5211	2 way Flanged PN16 V5328A	2 way Flanged PN16 High Close Off Pressure Balanced V5016A	2 way Flanged PN25 High Close Off Pressure Balanced V5025A	3 way BSP Screwed V5013R	3 way Flanged PN6 V5329C, V5015A	3 way Flanged PN16 V5329A, V5050A	3 way Flanged PN25/40 V5050A
15mm	V5011S1005 & R1000 Kvs0.63 600N close off 16	V5328A1153 Kvs0.63 600N close off 16	V5016A1028 Kvs0.63 600N close off 16	V5025A1027 Kvs0.63 600N close off 25	NA	NA	NA	NA
15mm	V5011S1013 & R1018 Kvs1 600N close off 16	V5328A1005 Kvs1 600N close off 16	V5016A1036 Kvs1 600N close off 16	V5025A1035 Kvs1 600N close off 25	NA	NA	NA	NA
15mm	V5011S1021 & R1026 Kvs1.6 600N close off 16	V5328A1013 Kvs1.6 600N close off 16	V5016A1044 Kvs1.6 600N close off 16	V5025A1043 Kvs1.6 600N close off 25	NA	NA	NA	NA
15mm	V5011S1039 & R1034 Kvs2.5 600N close off 16	V5328A1021 Kvs2.5 1800N close off 16	V5016A1051 Kvs2.5 600N close off 16	V5025A1050 Kvs2.5 600N close off 25	V5013R1032 Kvs2.5 600N close off 16	V5329C1000 Kvs2.5 600N close off 6	V5329A1004 Kvs2.5 600N close off 10	V5050A1124 Kvs2.5 1800N close off 25
15mm	V5011S1047 & R1042 Kvs4 600N close off 16	V5328A1039 Kvs4.0 1800N close off 16	V5016A1069 Kvs4 600N close off 16	V5025A1068 Kvs4 600N close off 25	V5013R1040 Kvs4 600N close off 16	V5329C1018 Kvs4 600N close off 6	V5329A1012 Kvs4 600N close off 10	V5050A1132 Kvs4 1800N close off 25
20mm	V5011S1054 & R1059 Kvs6.3 600N close off 16	V5328A1054 Kvs6.3 1800N close off 16	V5016A1077 Kvs6.3 600N close off 16	V5025A1076 Kvs6.3 600N close off 25	V5013R1057 Kvs6.3 600N close off 16	V5329C1026 Kvs6.3 600N close off 6	V5329A1020 Kvs6.3 600N close off 10	V5050A1140 Kvs6.3 1800N close off 25
25mm	V5011S1062 & R1067 Kvs10 1800N close off 16	V5328A1062 Kvs10 1800N close off 16	V5016A1085 Kvs10 600N close off 16	V5025A1084 Kvs10 600N close off 25	V5013R1065 Kvs10 1800N close off 16	V5329C1034 Kvs10 600N close off 6	V5329A1038 Kvs10 600N close off 10	V5050A1157 Kvs10 1800N close off 25
32mm	V5011S1070 & R1075 Kvs16 1800N close off 16	V5328A1070 Kvs16 1800N close off 16	V5016A1093 Kvs16 600N close off 16	V5025A1092 Kvs16 600N close off 25	V5013R1073 Kvs16 1800N close off 16	V5329C1042 Kvs16 600N close off 6	V5329A1046 Kvs16 1800N close off 10	V5050A1165 Kvs16 1800N close off 20
40mm	V5011S1088 & R1083 Kvs25 1800N close off 15	V5328A1088 Kvs25 1800N close off 13	V5016A1101 Kvs25 600N close off 16	V5025A1100 Kvs25 600N close off 25	V5013R1081 Kvs25 1800N close off 15	V5329C1059 Kvs25 1800N close off 6	V5329A1053 Kvs25 1800N close off 10	V5050A1173 Kvs25 1800N close off 13
50mm	V5011S1096 & R1091 Kvs40 1800N close off 8.5	V5328A1096 Kvs40 1800N close off 7.5	V5016A1119 Kvs40 600N close off 16	V5025A1118 Kvs40 600N close off 25	V5013R1099 Kvs40 1800N close off 8.5	V5329C1067 Kvs40 1800N close off 6	V5329A1061 Kvs40 1800N close off 10	V5050A1181 Kvs40 1800N close off 7.5
65mm	V5211F2002 Kvs54 600N close off 10	V5328A1104 Kvs63 1800N close off 4.7	V5016A1127 Kvs63 600N close off 16	V5025A1126 Kvs63 600N close off 25	NA	V5329C1075 Kvs63 1800N close off 5	V5329A1079 Kvs63 1800N close off 6.5	V5050A1199 Kvs63 1800N close off 5
80mm	V5211F2010 Kvs85.7 600N close off 10	V5328A1112 Kvs100 1800N close off 2.3	V5016A1135 Kvs100 600N close off 16	V5025A1134 Kvs100 600N close off 25	NA	V5329C1083 Kvs100 1800N close off 3.2	V5329A1087 Kvs100 1800N close off 4	V5050A1207 Kvs100 1800N close off 2.3
100mm	NA	V5328A1195 Kvs160 *1800N close off 2.3	V5016A1143 Kvs160 *1800N close off 16	V5025A1142 Kvs160 *1800N close off 25	NA	V5015A1151 Kvs140 *1800N close off 1.5	V5050A2088 Kvs160 *1800N close off 2.3	V5050A1215 Kvs160 *1800N B close off 2.3
125mm	NA	V5328A1203 Kvs250 *1800N close off 0.9	V5016A1150 Kvs250 *1800N close off 16	V5025A1159 Kvs250 *1800N close off 25	NA	V5015A1169 Kvs220 *1800N close off 1.2	V5050A2106 Kvs250 *1800N close off 0.9	NA
150mm	NA	V5328A1211 Kvs360 *1800N close off 0.9	V5016A1168 Kvs360 *1800N close off 16	V5025A1167 Kvs360 *1800N close off 25	NA	V5015A1177 Kvs310 *1800N close off 0.8	V5050A2114 Kvs360 *1800N close off 0.9	NA

*Models indicated require 38mm stroke actuators

Actuator Selection

2 or 3 Position Floating Control

ML6420A3007-E 600 Newton 24 VAC 1 Minute	ML6421A3005 1800 Newton 24 VAC 1.9 Minute	ML6421B3004 1800 Newton 24 VAC 3.5 Minute *38mm stroke	ML6425A3006 600 N spring return 24 VAC 1.8 Minute
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Analog 4-20mA & Voltage Control (ML7420 ML7425 require 500Ω resistor for 4-20mA, not supplied)

ML7420A8088-E 600 Newton 24 VAC 1 Minute	ML7421A1032-E 1800 Newton 24 VAC 1.8 Minute	ML7421B1023-E 1800 Newton 24 VAC 3.5 Minute *38mm stroke	ML7425A6016-E 600 N spring return 24 VAC 1.8 Minute
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Optional high temperature extension kit for applications >150°C process temperature

43196000-001 V5011/V5013 15-50mm V5328A/V5329A 15-32mm	43196000-002 V5328A/V5329A 40-80mm V5049A 15-65mm V5050A/V5016A/V5025A 15-80mm	43196000-038 All valves 100 to 150mm with 38mm stroke
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Heavy Duty Series 2000, 2 Way Valves



- **Series 2000** comprises a range of single seated, straight through top guided globe valves. Suitable for a wide variety of industrial applications.

Size 15 to 300mm

Advance engineering

Proven design

Compact

High pressure and high temperature applications

Low noise trims

ANSI and DIN body patterns

Full range of accessories

Contact your Honeywell distributor for model selection.

Electro-Pneumatic Valve Positioner				
<i>Model Number</i>	<i>Description</i>	<i>Range</i>	<i>Input</i>	<i>Stroke</i>
LOGIX510SI-15-W2DSE-0000-00-0 (Replaces EP2302-00, EP2201)	Positioner for S2000 valves	1.5 to 6 bar	4-20mA	15 deg min. 90 deg max
9930001-001 <i>Replaces P5-30168</i> (differs from EP2300 Namur kit model 43192685-001)	Namur Mounting Kit (required when replacing EP series positioners)			

Common Series 2000 Valve Spares				
<i>Model Number</i>	<i>Description</i>	<i>Size</i>	<i>Actuator</i>	
43163091-003	PTFE packing	15-50mm valves		
43163091-004	PTFE packing	65-100mm valves		
43177683-001	Actuator diaphragm	9 inch	2109/2009	
43177684-001	Actuator diaphragm	12 inch	2102/2012	
43180843-011	Actuator stem seal	9 inch	2109/2009	
43180844-011	Actuator stem seal	12 inch	2102/2012	

2 & 3 Way Hydronic Zone Valves



- VC Motorised Hydronic Valves**

2 and 3 way balanced hydronic valves for On/Off and modulating control of hot and/or cold water flow in both domestic boiler heating and in small commercial heating and cooling applications. 3 way valves can be piped for mixing or diverting. Anti-water hammer sinusoidal closing.

Features

Actuator: Drive Open/Drive Closed

Cable: 1m

Timing: On/off 7sec. modulating 140 sec.

Temp: 1-95°C

Pressure Rating: Static: 2,000kPa Burst: 10,000kPa

Close off: 400 kPa Differential

Body: Bonze

VC 2 Way Valve

<i>Model Number</i>	<i>Size Inches</i>	<i>Electrical</i>	<i>Kvs</i>	<i>Features</i>
VC4013AF1000	1/2" BSPP	240V 2 Wire + Common	3.0	SPST Switch On/off
VC4013AJ1000	3/4" BSPP	240V 2 Wire + Common	5.3	SPST Switch On/off
VC4013AP1000	1" BSPP	240V 2 Wire + Common	6.0	SPST Switch On/off
VC7931AF1111T	1/2" BSPP	24 VAC, 2 to 9 VDC	2.9	Modulating
VC7931AJ1111T	3/4" BSPP	24 VAC, 2 to 9 VDC	4.9	Modulating
VC7931AP1111T	1" BSPP	24 VAC, 2 to 9 VDC	6.0	Modulating
VC7931BF1111T	1 1/4" BSPP	24 VAC, 2 to 9 VDC	6.3	Modulating

VC 3 Way Valve

<i>Model Number</i>	<i>Size Inches</i>	<i>Electrical</i>	<i>Kvs</i>	<i>Features</i>
VC4013ME6000	1/2" BSPP	240V 2 Wire + Common	3.4	SPST Switch On/off
VC4013MH6000	3/4" BSPP	240V 2 Wire + Common	7.0	SPST Switch On/off
VC4013MP6000	1" BSPP	240V 2 Wire + Common	7.7	SPST Switch On/off
VC7931ME6111T	1/2" BSPP	24 VAC, 2 to 9 VDC	2.9	Modulating
VC7931MH6111T	3/4" BSPP	24 VAC, 2 to 9 VDC	4.8	Modulating
VC7931MP6111T	1" BSPP	24 VAC, 2 to 9 VDC	5.9	Modulating
VC7931NF6111T	1 1/4" BSPP	24 VAC, 2 to 9 VDC	5.9	Modulating

VC Valve Parts

<i>Model Number</i>	<i>Description</i>	<i>Electrical</i>		<i>Features</i>
VC4613ZZ00	Actuator	240V 2 Wire + Common		SPST Switch
VC4603ZZ00	Actuator	240V 2 Wire + Common		
VC7931ZZ11	Actuator	24 VAC 0/2-10 VDC		Modulating

2 & 3 Way Hydronic Zone Valves



- **Motorized hydronic zone valves**

The V4043/44 series motorized valves are used in a wide range of flow control applications in domestic central heating systems.

Features

240 Volt 2 wire control

Spring return action.

Two position operation.

Manual lever for filling/draining down

Quiet operation, minimal power consumption.

V4043 2 Way Valve

<i>Model Number</i>	<i>Size Inches</i>	<i>Max. Differential Pressure For Close Off</i>	<i>Kvs</i>	<i>Features</i>
V4043C1156	½ BSP	1.38 bar	3.0	
V4043H1007	¾ BSP	0.55 bar	6.9	SPST Switch
V4043H1080	1 BSP	0.45 bar	8.6	SPST Switch

V4044 & V4073 3 Way Valve

<i>Model Number</i>	<i>Size Inches</i>	<i>Max. Differential Pressure For Close Off</i>	<i>Kvs</i>	<i>Features</i>
V4044C1098	¾ BSP	0.69 bar	6.0	Mixing or Diverting
V4044C1494	1 BSP	0.55 bar	8.1	Mixing or Diverting
V4073A1062	1 BSP	0.55 bar	8.1	Mid Position Valve



- **VU series motorized hydronic zone valves**

The VU series of two port motorized valves has a wide range of flow control applications in commercial HVAC and domestic central heating systems.

Features

240 Volt 2 wire control normally closed

15 Second opening time, 4 seconds to close

Spring return action.

Two position operation

Manual lever for filling/draining down

Body is rated to 20 bar maximum

Ambient temperature range 1 to 52°C @ 94°C fluid temp.

Chilled or hot water with up to 60% Glycol

VU 2 Way Valve Body & Actuator

<i>Model Number</i>	<i>Description & Size Inches</i>	<i>Max. Diff. Pressure For Close Off</i>	<i>Kvs</i>	<i>Features</i>
VU53T1019B	¾ BSP Body	0.69 bar	3.0	
VU53T1027B	1 BSP Body	0.69 bar	7.0	
VU443E1025	230V Actuator			SPST N.O. Switch

Small Valve Actuators, 2 Position Control



- **Actuator thermoelectric for zone control 2,5/6,5 mm 90 N, Smart-T**

Electrical actuator, on/off and PWM control, for V58xxA/C (DN15/20) and V90 valve series. MT4 models also suitable for TRV's V300, V2000, the Therafix TRV's V2464, V2474; and for the balancing valves V5010, V5032 (in combination with adapter VA2500A001).

Protection class, IP44

Position indication with red indicator

Optional end switch SPST, 230Vac 5(3) A; contact closes at power on

Stem force, 90 N

Control input signal, 2 position

Additional description

Actuator supplied with mounting clip (MT-CLIP) and M30 x 1,5 adapter (MT-ADAPT-HW).

- Other adapters on request.
- 24 Vac models also suitable for 24 Vdc.
- 1m cable. 2.5m cable available on request.
- Effective stroke for Honeywell valves 2,5/6,5 mm; maximum stroke 4/8 mm.

Smart T Series Actuators 2.5mm Stroke

<i>Model Number</i>	<i>End Switch</i>	<i>Voltage</i>	<i>Run Time Min</i>	<i>Loss Of Power</i>
MT4-230-NO		230 VAC	2.5	Stem Retracts
MT4-230S-NO	Yes	230 VAC	2.5	Stem Retracts
MT4-024-NO		24 VAC	4	Stem Retracts
MT4-024S-NO	Yes	24 VAC	4	Stem Retracts
MT4-230-NC		230 VAC	2.5	Stem Extends
MT4-230S-NC	Yes	230 VAC	2.5	Stem Extends
MT4-024-NC		24 VAC	4	Stem Extends
MT4-24S-NC	Yes	24 VAC	4	Stem Extends

Smart T Series Actuators 6.5mm Stroke

<i>Model Number</i>	<i>End Switch</i>	<i>Voltage</i>	<i>Run Time Min</i>	<i>Loss Of Power</i>
MT8-230-NO		230 VAC	3.5	Stem Retracts
MT8-230S-NO	Yes	230 VAC	3.5	Stem Retracts
MT8-024-NO		24 VAC	6.0	Stem Retracts
MT8-024S-NO	Yes	24 VAC	6.0	Stem Retracts
MT8-230-NC		230 VAC	3.5	Stem Extends
MT8-230S-NC	Yes	230 VAC	3.5	Stem Extends
MT8-024-NC		24 VAC	6.0	Stem Extends
MT8-024S-NC	Yes	24 VAC	6.0	Stem Extends

Small Valve Actuators, 3 Pt. & 0/2-10 V Control



- **Electrical actuator floating control, for valve series: V5822, V5823, V5832, V5833. And also for V5077B/V5078B valve series (with adapter).**

Protection class	IP43/IP42
Position indication	with red indicator
End switch function/capacity	SPDT; capacity 1 A inductive, 5 A resistive
Control input signal	3-position 24 VAC
Effective valve stroke	6.5 mm
Runtime	150 s;50Hz

Additional description For M7410-models, the valve cap can be used for manual adjustment. For models with 2 end switches, the 2nd switch is adjustable

M7410A,C Series Actuators

<i>Model Number</i>	<i>Force</i>	<i>Control Type</i>	<i>Manual Operation</i>	<i>Additional Information</i>
M7410A1001	90 N	3-position	Yes	4mm stroke, 53 sec. for V135, V136, V58..A4, V58..C4
M7410C1007	180 N	3-position	No	6.5mm stroke
M7410C1015	300 N	3-position	No	6.5mm stroke



- **Electrical actuator modulating control, for valve series: V5822, V5823, V5832, V5833.**

Protection class	IP42
Position indication	with red indicator
End switch function/capacity	SPDT, capacity 1A inductive, 5A resistive
Power supply	24 Vac 1,4 VA
Control input signal	0/2..10V
Effective valve stroke	6.5 mm
Runtime	150 s;50Hz
Cable length	1,5 m

Additional description The control action is reversible. For M7410E1...-models, the valve cap can be used for manual adjustment.

M7410 Series Actuators

<i>Model Number</i>	<i>Force</i>	<i>Control Type</i>	<i>Manual Operation</i>	
M7410E1002	180 N	0/2 to 10 VDC	No	
M7410E1028	300 N	0/2 to 10 VDC	No	
M7410E2034	300 N	0/2 to 10 VDC	Yes	

Small 2 Way Control Valves



- **Control valve for actuator or thermostatic head. For district heating, individual room control and fan coil units; cold/hot water.**

Valve type	V136 2-way valve
Materials	body red brass RG5, trim stainless steel
Action	stem extension opens valve
Close off pressure with 90N motor	600 kPa
Stroke	2.5 mm
Media temperature	2 ... 120 °C
Static pressure	PN16
Port connection type	internal threads
Flow char.	equal perc
Actuator connection	M30 x 1.5mm

V136 Series Valve				
<i>Model Number</i>	<i>Size mm</i>	<i>Kvs</i>		<i>Actuators</i>
V136-15B	15	1		MT4, T100R
V136-25B	25	2.5		As Above

Small 2 Way Control Valves, Conical Seal



- Two-way control valve PN16, conical sealing connections DN15/20, V5822A. For individual room control, fan coil units and small re-heaters/re-coolers; hot water or cold water (max. 50% glycol), water quality VDI2035.

Valve type	V5822, 2-way valve
Materials	body DN15 brass, DN20 red brass, stem stainless steel, plug brass
Action	stem extension opens valve
Media temperature	2 ... 120 °C
Static pressure	16 bar
Port connection type	conical sealing
Additional description	Valves are supplied with adjustment cap (not for on/off types). Order end fitting accessories separately. Actuators MT8, M6410, M7410

V5822 Series Valve				
Model Number	Size mm	Kvs	Close Off 90 N Motor bar	Close Off 180 N Motor bar
V5822A1006	15	0.16	6	16
V5822A1014	15	0.25	6	16
V5822A1022	15	0.4	6	16
V5822A1030	15	0.63	6	16
V5822A1048	15	1	1.8	12
V5822A1055	15	1.6	1.8	12
V5822A1063	20	2.5	0.5	4
V5822A1071	20	4	0.5	4

Accessories

Compression fitting for DN15 valve, pipe size 15 mm
 Compression fitting for DN20 valve, pipe size 22 mm
 Soldering fitting for DN15 valve, pipe size 12 mm
 Soldering fitting for DN20 valve, pipe size 15 mm
 External threaded fitting for DN15 valve, pipe size 3/8"
 External threaded fitting for DN20 valve, pipe size 1/2"
 Service tool to clean/replace inserts
 Brush for WV108

ACN-15C
ACN-20C
ACN-15S
ACN-20S
ACN-15T
ACN-20T
WV108
WV108B

Small 2 Way Control Valves, Flat Seal



- Two-way control valve PN16, flat sealing connections DN15/20, V5832A For individual room control, fan coil units and small re-heaters/re-coolers; hot water or cold water (max. 50% glycol), water quality VDI2035.

Valve series	V5832A
Valve type	2-way
Medium type	water
Materials	body brass, stem stainless steel, plug brass
Action to open	stem up
Media temp.	2 ... 120°C
Static pressure	PN16
Port connection type	ext. thread flat sealing
Additional description	Valves are supplied with adjustment cap (not for on/off types).

V5832 Series Valve				
<i>Model Number</i>	<i>Size mm</i>	<i>Kvs</i>	<i>Close Off 90 N Motor bar</i>	<i>Close Off 180 N Motor bar</i>
V5832A1004	15	0.16	6	16
V5832A1012	15	0.25	6	16
V5832A1020	15	0.4	6	16
V5832A1038	15	0.63	6	16
V5832A1046	15	1.0	1.8	12
V5832A1053	15	1.6	1.8	12
V5832A1061	20	2.5	0.5	4
V5832A1079	20	4	0.5	4

Accessories

Soldering fitting for DN15 valve, pipe size 12 mm
 Soldering fitting for DN20 valve, pipe size 15 mm
 External threaded fitting for DN15 valve, pipe size 3/8"
 External threaded fitting for DN20 valve, pipe size 1/2"
 Service tool to clean/replace inserts
 Brush for WV108

AC-15FS
AC-20FS
AC-15FT
AC-20FT
WV108
WV108B

Small 3 Way Control Valves



- Control valve for electric actuator or thermostatic head. For individual room control and fan coil units; cold/hot water.

Valve type	V135, 3-way mixing/diverting valve
Materials	body red brass RG5, stem stainless steel, plug polysulfon
Action	stem extension opens A-AB
Close off pressure with 90N motor	1000 kPa
Stroke	2 mm
Media temperature	2 ... 120 °C
Static pressure	PN16
Flow char.	linear
Additional description	Valves are supplied with handwheel.

V135 Series Valve

Model Number	Size mm	Kvs		Actuators
V135-1/2B	15	2.8		MT4, M7410
V135-3/4B	20	3.2		As Above
V135-1B	25	5		As Above
V135-1 1/4B	32	5		As Above

- For under floor heating, heating and air conditioning; cold/hot water.



Valve type	3-way mixing valve
Materials	body red brass RG5, trim stainless steel
Action	stem extension opens A-AB
Close off pressure with 90N motor	1000 kPa
Stroke	8 mm use (*use adapter ring for 6.5mm stroke actuators)
Media temperature	2 ... 120 °C
Static pressure	16 bar
Port connection type	internal threads ISO228
Flow char.	equal perc.
Additional description	Adapter ring 0903403 must be used for mechanical interface; and must be ordered seperately.

V5078 Series Valve

Model Number	Size mm	Kvs		Actuators
V5078B1005	15	2.5		MT4, M7410
V5078B1013	20	3.3		As Above
V5078B1021	25	5		As Above
V5078B1039	32	5		As Above
V5078B1047	40	11		As Above
V5078B1054	50	13		As Above

Small 3 Way Control Valves, Conical Seal



- For individual room control, fan coil units and small re-heaters/re-coolers; hot water or cold water (max. 50% glycol), water quality VDI2035.

Valve type	V5823, 3-way mixing valve
Materials	body red brass, stem stainless steel, plug brass
Action	stem retraction opens A-AB
Media temperature	2 ... 120 °C
Static pressure	16 bar
Port connection type	conical sealing
Additional description	Valves are supplied with adjustment cap (not for on/off types). The valve capacity for linear ports is one stage smaller then for equal percentage ports. Order end fitting accessories separately.

V5823 Series Valve				
Model Number	Size mm	Kvs, A to AB	Close Off 90 N Motor bar	Close Off 180 N Motor bar
V5823A2003	15	0.25	5	8
V5823A2011	15	0.4	5	8
V5823A2029	15	0.63	5	8
V5823A2037	15	1	1.5	2.5
V5823A2045	15	1.6	1.5	2.5
V5823A2151	20	2.5	-	2.4
V5823A2052	20	2.5	0.5	1
V5823A2169	20	4.0	-	2.4
V5823A2060	20	4.0	0.5	1

Accessories

Compression fitting for DN15 valve, pipe size 15 mm
 Compression fitting for DN20 valve, pipe size 22 mm
 Soldering fitting for DN15 valve, pipe size 12 mm
 Soldering fitting for DN20 valve, pipe size 15 mm
 External threaded fitting for DN15 valve, pipe size 3/8"
 External threaded fitting for DN20 valve, pipe size 1/2"
 Service tool to clean/replace inserts
 Brush for WV108

ACN-15C
ACN-20C
ACN-15S
ACN-20S
ACN-15T
ACN-20T
WV108
WV108B

Small 3 Way Control Valves, Flat Seal



- Three-way control valve PN16, flat sealing connection DN15/20, V5833A. For individual room control, fan coil units and small re-heaters/re-coolers; hot water or cold water (max. 50% glycol), water quality VDI2035.

Valve series	V5833A
Valve type	3-way mixing
Medium type	water
Materials	body brass, stem stainless steel, plug brass
Action to open	stem down
Media temp.	2 ... 120 °C
Static pressure	PN16
Port connection type	ext. thread flat sealing
Additional description	Valves are supplied with adjustment cap (not for on/off types). If the main-port (A-AB) is equal percentage, the B-AB port is linear. The valve capacity of B-AB is one stage smaller.

V5833 Series Valve				
Model Number	Size mm	Kvs, A to AB	Close Off 90 N Motor bar	Close Off 180 N Motor bar
V5833A1003	15	0.25	5	8
V5833A1011	15	0.4	5	8
V5833A1029	15	0.63	5	8
V5833A1037	15	1.0	1.5	2.5
V5833A1045	15	1.6	1.5	2.5
V5833A3009	20	2.5	-	2.4
V5833A1052	20	2.5	0.5	1.0
V5833A3017	20	4.0	-	2.4
V5833A1060	20	4.0	0.5	1.0

Accessories

Soldering fitting for DN15 valve, pipe size 12 mm
 Soldering fitting for DN20 valve, pipe size 15 mm
 External threaded fitting for DN15 valve, pipe size 3/8"
 External threaded fitting for DN20 valve, pipe size 1/2"
 Service tool to clean/replace inserts
 Brush for WV108

AC-15FS
AC-20FS
AC-15FT
AC-20FT
WV108
WV108B

Rotary Actuators & Valves



- **Electrical actuator for valve series DR, V5421, V5431, V5441.**

Protection class	IP54
Position indication	reversible scale plate
Angle of rotation	90 °
Manual operation	yes

Additional description	Manual operation by declutch of gear 3 position control or 0/2-10 VDC Includes ATK2040A linkage for DR series Order adapter ATU2040A for older V5069 & V5070 valves
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M6061/M7061 Series Rotary Actuators

<i>Model Number</i>	<i>Input Signal</i>	<i>Voltage</i>	<i>Force</i>	<i>Run Time Min.</i>
M6061A1013	3 Position	24 VAC	10 Nm	1.5
M6061A1039	3 Position	24 VAC	30 Nm	2.3
M6061A1047	3 Position	24 VAC	40 Nm	3.5
M6061L1019	3 Position	230 VAC	10 Nm	1.5
M6061L1035	3 Position	230 VAC	30 Nm	2.3
M6061L1043	3 Position	230 VAC	40 Nm	3.5
M7061E1020	0/2-10VDC	24 VAC	20 Nm	3.0



- **For supply water, heating and air conditioning; hot/cold water quality VDI2035; glycol water mixture 50%. Manual or electric operation.**

Valve type	3-way mixing valve
Materials	body cast iron, inner parts chrome plated
Packing	double O-ring sealing
Reduced delta P	40 kPa
Angle of rotation	90 °
Media temperature	2 ... 130 °C
Static pressure	6 bar
Flange	DIN2531
Size	Full range of sizes from 20 to 200mm
Replaces	V5431F series

DR Series Rotary Shoe Valve

<i>Model Number</i>	<i>Flange Size mm</i>	<i>Kvs</i>	<i>Torque For Max DP NM</i>	<i>Max Differential Pressure Bar</i>
DR50GFLA	50	40	20	1
DR65GFLA	65	63	20	1
DR80GFLA	80	100	30	1
DR100GFLA	100	160	40	1
DR125GFLA	125	250	40	0.7
DR150GFLA	150	630	40	0.5
DR200GFLA	200	1600	40	0.5

Butterfly Valves



- **Motorised for heating and cooling applications, or boiler management systems.**

In combination with rotary actuators M6061A,L and M7061E as well as (for DN200) damper actuator M6422L1003, the V5421B butterfly valves are suitable for heating and cooling applications as well as boiler management systems.

Valve type	V5421B butterfly valve, 25 to 200mm
Materials	housing ductile iron GGG40, shaft stainless steel
Angle of rotation	90°
Media temperature	-10 to 130°C
Static pressure	PN16
Connection type	Wafer

Additional description	Without flanges. Actuators (M6061 & M7061) to be ordered separately
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New



- **V4 butterfly valve with factory mounted electric actuator.**

The V4 actuated wafer flange butterfly valves are suitable for heating and cooling applications. The V4 series is equipped with standard On-Off or modulating (4-20mA, 1-5V, or 0(2)-10V selectable by DIP switch) control quarter-turn electric actuator.

Valve	
Size	DN50 to DN600 (Wafer Flange)
Nominal pressure	PN16
Leakage	Bubble tight
Medium temperature	-10 to +90°C
Body material	GG25 (for DN50...DN150), GGG40 (for DN200...DN600)
Stem material	SS416
Disc material	Epoxy coated ductile iron GGG40
Liner material	EPDM
Medium type	Chilled and hot water
Pipe connection	ISO7005-2

Actuator	
Power supply	220Vac 50/60 Hz or 24Vac 50/60 Hz models
Input	Modulating 4-20mA, 1-5V, 0(2)-10V or 3-Position models
Environmental protection	IP67 Waterproof
Ambient temperature	-5 to 65°C
Indicator	Continuous position indicator
Manual override	Non-clutch design
Space heater	15W 220V anti-condensation
Material	Aluminium alloy
External coating	Dry powder coating
Stall protection	Built-in thermal protection, off at 125 ± 5°C, reset at 95 ± 5°C

Contact your Honeywell distributor for butterfly valve model selection.

Ball Valves



- Ball valves for modulating control applications**

These cast brass two-way ball valves are used for modulating control of hot or chilled water in heating, ventilating and air conditioning systems

Valve type	2-way ball valve
Materials	Body cast brass, SS ball & stem
Seat	Reinforced PTFE
Angle of rotation	90 °
Media temperature	-5 ... 120 °C
Static pressure	16 bar
End connections	BSP
Turn down	300:1
Leakage rate	≤ 0.01% of Kvs
Flow characteristic	Equal percentage

Actuators

Select from the range of Honeywell Direct Coupled Actuators to match the recommended torque.

VBA Ball Valves				
<i>Model Number</i>	<i>Size mm</i>	<i>Kvs</i>	<i>Close Off Bar</i>	<i>Recommended Actuator Torque</i>
VBA216-020P	DN20	6.3	8	5 Nm
VBA216-025P	DN25	10	8	5 Nm
VBA216-032P	DN32	16	8	5 Nm
VBA216-040P	DN40	26	8	10 Nm
VBA216-050P	DN50	41	8	10 Nm
VBA216-065P	DN65	51	8	20 Nm
VBA216-080P	DN80	81	8	20 Nm

Balancing Valves, Kombi-2-Plus



- **V5032 Kombi-2-plus variable orifice double-regulating balancing valve**

Shutoff and balancing valve for the return mains and branch pipelines. For water-based heating and cooling systems.

Materials	Valve housing made of red bronze RG5 to DIN 1705 with brass pressure test cocks, insert made of brass with EPDM O-rings and PTFE seat sealing, handwheel made of blue plastic
Body pattern	Y-pattern
Medium type	water or water-glycol mixture according to VDI 2035
Media temp.	2 ... 130 °C
Static pressure	PN16
Pre-setting	yes
Position indication	Digital display of pre-setting value.
Draining/filling support	yes
Measuring support	yes
Automatic balancing support	yes
Connection of accessories	spindle / side connections
Place in installation	return
Port connection type	internal threads
Additional description	Can be converted into automatic Diff Pr.-controller by retrofitting a V5012 Kombi-DP Diaphragm Unit (see 'Accessories'), also after installation has been put into service.

V5032 Kombi-2-Plus Balancing Valve				
<i>Model Number</i>	<i>Pipe Size mm</i>	<i>Kvs</i>		
V5032Y0015	15	2.7		
V5032Y0020	20	6.4		
V5032Y0025	25	6.8		
V5032Y0032	32	21		
V5032Y0040	40	22		
V5032Y0050	50	38		
V5032Y0065	65	47.7		
V5032Y0080	80	71		

Thermostatic Expansion Valves for Refrigeration



TMV



TMVX



TMVBL



TMVXBL

- **Series TMV Thermostatic Expansion Valves with interchangeable orifice cartridge and adjustable superheat setting**

Thermostatic expansion valve for use in general refrigeration and original equipment. Plants with one or more circuits, refrigerated cabinets even with cramped mounting conditions, deep-freezing plants, ice and cream machines, milk cooling units, water chillers, vehicle air conditioning systems, cold stores, air conditioning systems. • Internal pressure equalization: for single injection in plants with single and multiple evaporators.

Extreme durability thanks to welded stainless steel head and stainless steel diaphragm.

Suitable for systems with hot gas defrosting.

For maximum pressure PS see specification sheet.

For maximum test pressure PF see specification sheet .

Series	TMV
Orifice	Interchangeable
Connections	Solder/flare
Pressure	Equalizer internal
Balanced port	No
Superheat setting	Adjustable
Capillary tube length	1,5 m
Bulb diameter	12 mm
Brass parts	Body
Stainless steel parts	Internals, thermal head
Copper parts	Connection tubes, bulb
Max. ambient temp.	100°C
Max. bulb temp.	140°C

Thermal charge

Adsorber charge with damping characteristic for stable superheat control - only one valve necessary for the whole evaporating temperature range - the advantage with the combi adsorber charge is that for each of the refrigerant groups only one valve is required.

Installation
Superheating
Adjustment

Valves may be installed in any position.

Mean static superheat 3K

Valves should initially be installed with the factory setting unaltered. Should adjustment be necessary, remove the sealing cap and adjust the spindle.

Right turn (clock wise)- Reduces flow increasing superheat.

Left turn (anti-clock wise)- Increases flow decreasing superheat.

One turn of the adjusting spindle alters superheat by approximately 0.55 bar.

With Absorber charge it is possible for charge migration or reversal to occur, thereby offering the user a reliable, trouble free valve.

See over page for model selection guide

Thermostatic Expansion Valves for Refrigeration

Refrigeration Gasses R134a R401A R12				
Model Number	RC Number	Equalisation	Evap. Temp.	Connection In/Out
TMV-00005	F1602	Internal	15 to -30°C	UNF: 5/8"/UNF: 3/4"
TMVX-00105	F1604	External	15 to -30°C	UNF: 5/8"/UNF: 3/4"
TMVBL-00105	F1652	Internal	15 to -30°C	UNF: 5/8"/ODF: 12mm
TMVXBL-00105	F1654	External	15 to -30°C	UNF: 5/8"/ODF: 12mm

Refrigeration Gasses R22 R407C R407A R422D				
Model Number	RC Number	Equalisation	Evap. Temp.	Connection In/Out
TMV-00001	F1606	Internal	15 to -45°C	UNF: 5/8"/UNF: 3/4"
TMVX-00101	F1608	External	15 to -45°C	UNF: 5/8"/UNF: 3/4"
TMVBL-00101	F1656	Internal	15 to -45°C	UNF: 5/8"/ODF: 12mm
TMVXBL-00101	F1658	External	15 to -45°C	UNF: 5/8"/ODF: 12mm

Refrigeration Gasses R404A R402A R502 R507A				
Model Number	RC Number	Equalisation	Evap. Temp.	Connection In/Out
TMV-00008	F1610	Internal	0 to -50°C	UNF: 5/8"/UNF: 3/4"
TMVX-00108	F1612	External	0 to -50°C	UNF: 5/8"/UNF: 3/4"
TMVBL-00108	F1660	Internal	0 to -50°C	UNF: 5/8"/ODF: 12mm
TMVXBL-00108	F1662	External	0 to -50°C	UNF: 5/8"/ODF: 12mm

Orifices



Normal capacities (kW) based on 1K subcooling/1.5 bar pressure drop

Orifices							
Model Number	RC Number	Orifice Cartridges	R134a -5 to 40°C	R22 -5 to 40°C	R22 -25 to 40°C	R404a -5 to 40°C	R404a -25 to 40°C
TMVD-00001	F1624	1.0	0.34	0.52	0.36	0.35	0.23
TMVD-00002	F1626	1.5	0.65	0.98	0.69	0.66	0.43
TMVD-00003	F1628	2.0	0.90	1.35	0.94	0.94	0.61
TMVD-00004	F1630	2.5	1.29	1.97	1.38	1.36	0.88
TMVD-00005	F1632	3.0	2.09	3.16	2.21	2.15	1.40
TMVD-00006	F1634	3.5	2.69	3.99	2.79	2.72	1.77
TMVD-00007	F1636	4.5	3.78	5.75	4.02	3.93	2.56
TMVD-00008	F1620	0.5	6.17	9.17	6.41	6.27	4.09
TMVD-00009	F1622	0.7	8.16	12.12	8.48	8.24	5.37
TMVD-00010	F1618	0.3	11.04	16.89	11.81	11.52	7.50
TMVD-00011	F1638	4.75	14.92	22.27	15.58	15.17	9.88

Pressure Equaliser Lines

Pressure Equaliser Lines				
Model Number	Size	External/Internal Dia.	Qty	Connection
ZE-00028	1.0m	3.00/1.25mm	10	7/16" UNF at both ends
ZE-00029	0.6m	3.00/1.25mm	10	7/16" UNF at both ends

Pneumatic Controls



- High quality pneumatic thermostat

Room-mounted pneumatic temperature controller. For proportional control of pneumatic valve and damper actuators in heating and air conditioning systems.

Thermostats				
<i>Model Number</i>	<i>Range</i>	<i>Action</i>	<i>Capacity</i>	<i>Flow Rate</i>
TP973A2084	15 -30°C	Direct	Low (1 or 2 pipe)	5.2 ml/sec
TP973B2074	15 -30°C	Reverse	Low (1 or 2 pipe)	5.2 ml/sec
TP970A2020	15 -30°C	Direct	High (2 pipe)	5.2 ml/sec
TP970B2010	15 -30°C	Reverse	High (2 pipe)	5.2 ml/sec

Thermostat Accessories				
<i>Model Number</i>	<i>Type</i>	<i>Mounting</i>	<i>Front</i>	<i>Use With</i>
14004406-300	Satin Chrome	Vertical	Blank	TP973 & TP970
14004406-910	Satin Chrome Universal Cover	Vertical or Horizontal	Scale or blank option	TP973 & TP970
14002053-001	Backing Plate			TP973 & TP970

Tube				
<i>Model Number</i>	<i>Size</i>	<i>Spool Length Feet</i>	<i>Colour</i>	
AK3052W1	5/32"	500	Black	
AK3070B	1/4"	250	Red Stripe	
AK3070E	1/4"	250	Green Stripe	

Brass Fittings				
<i>Model Number</i>	<i>Type</i>			
CCT1590B	1/4" Barb to 1/8" NPT Male Adapter (Straight)			
CCT1595BT	1/4" Barb to 1/8" NPT Male Adapter (Elbow)			
CCT1606B	1/4" Barb to 5/32" Barb Coupling			
CCT1607B	1/4" Barb to 1/4" Barb Coupling			
CCT1612B	1/4" x 1/4" x 1/4" Barb Tee			
CCT1628B	5/32" Barb to 5/32" Barb Coupling			
CCT1640	1/4" Tubing Plugs			
CCT1641	5/32" x 5/32" Barb Elbows			
CCT1642	1/4" x 1/4" Barb Elbows			

Tools				
<i>Model Number</i>	<i>Type</i>			
CCT729A	Gauge Adapter			
CCT735A	Screwdriver / Allen Key			
305965	0 - 30 psi Gauge			

Pneumatic Controls



- **Pneumatic valve actuator**

Pneumatic actuator for valves in heating and air conditioning systems. Actuators are suitable for 20mm stroke valves type: V5011, V5013, V5015, V5049, V5050, V5095, V5328, V5329. Positioner (shown in picture) available on MP953E Replacement positioner for MP953E1368 model 14004139-001

MP Series Valve Actuators

<i>Model Number</i>	<i>Size Inches</i>	<i>Action</i>	<i>Range PSI</i>	<i>Stroke mm</i>
MP953C1018	5	Direct	8-12	20
MP953C1026	5	Direct	4-11	20
MP953C1067	8	Direct	2-7	20
MP953C1075	8	Direct	8-12	20
MP953C1083	8	Direct	4-11	20
MP953D1107	7	Reverse	8-13	20
MP953D1131	7	Reverse	4-11	20
MP953E1368	8	Direct	4-11 positioner (3 PSI span)	20
MP953E1400	13	Direct	4-11 positioner (5 PSI span)	38
MP953E1418	13	Direct	4-11	38



- **Pneumatic damper actuator**

Pneumatic actuators for dampers that control the volume of air in induction units, mixing boxes, and variable volume systems. Maximum supply pressure 30 PSI.
(MP913 above left, MP909 above right)

Damper Actuators

<i>Model Number</i>	<i>Stroke mm</i>	<i>Force</i>	<i>Range PSI</i>	<i>Features</i>
MP909D1227	60	Low	5-10	
MP913A1011	25	Low	10-15	Mounting bracket

VP Valve Replacement



- MP958A Pneumatic Valve Actuator**

The MP958A Pneumatic Valve Actuator is direct acting. However when combined with the V5823A valve and port plug for the 3rd port it will provide reverse acting control in a 2 way application.

For direct acting applications select V5822A valve.

Air Connection: Push-on connector for 1/4 in. [6 mm] O. D. plastic tubing.

Maximum Safe Air Pressure: 30 psi [207 kPa].

Maximum Diaphragm Temperature: 230 F [110 C].

Select MP958A Series Valve Actuators

<i>Model Number</i>	<i>Action</i>	<i>Range PSI</i>		<i>Features</i>
MP958A1009	Direct	2-5		Provides 2 way reverse action with V5823A and port plug
MP958A1017	Direct	3-10		As above
MP958A1025	Direct	8-11		As above

- V5823 & V5822 valve bodies**

Select valve body to suit the application. V5823 for 2 way reverse acting with port plug or 3 way mixing. V5822 for 2 way direct acting

Select V5823 or V5822 Series Valves

<i>Model Number</i>	<i>Size mm</i>	<i>Kvs</i>	<i>Application</i>	<i>Port Plug</i>
V5823A2029	15	0.63	2 way RA with ACP plug or 3 way	ACN-15P
V5823A2037	15	1	2 way RA with ACP plug or 3 way	ACN-15P
V5823A2045	15	1.6	2 way RA with ACP plug or 3 way	ACN-15P
V5823A2151	20	2.5	2 way RA with ACP plug or 3 way	3 rd Party
V5822A1030	15	0.63	2 way Direct Acting	N/A
V5822A1048	15	1	2 way Direct Acting	N/A
V5822A1055	15	1.6	2 way Direct Acting	N/A
V5822A1063	20	2.5	2 way Direct Acting	N/A

Select Port Plug for 2 Way Reverse Acting Applications

<i>Model Number</i>	<i>Size mm</i>	<i>Application</i>		
ACN-15P	15	Converts V5823A to 2 way Reverse Acting		
3 rd Party Supply	20	Converts V5823A to 2 way Reverse Acting		

Select Valve Tail Pieces To Suite Pipe Connection

<i>Model Numbers</i>	<i>Valve Size</i>	<i>Converts To Pipe Size</i>	<i>Notes</i>	
ACN-15T	15mm	3/8" Male	Order 1 per valve port	
ACN-20T	20mm	1/2" Male	As above	
S15'BRS	15mm	1/2" Female	Order from Plumbing World	
ACN-20T & S15'BRS	20mm	1/2" Female	Order S15'BRS from Plumbing World	
TT48-8-8 & S15'BRS	15mm	1/2" Flare	Order from Plumbing World	
ACN-20T S15'BRS & TT48-8-8	20mm	1/2" Flare	Order S15'BRS & TT48-8-8 from Plumbing World	

Thermostatic Radiator Valve Actuators



- **Thermostatic radiator valve head with internal liquid or wax-filled sensing element. Equipped with red economy button.**

Suitable for all Honeywell thermostatic radiator valve bodies or valve inserts, and all thermostatic radiator valve bodies and compact radiator valve inserts with M30 x 1,5 connections and 11,5 mm closing dimension.

Approvals	EN215
Setpoint blocking	no
Setpoint limiting	no
Closing dimension	11,5 mm
Body to head connection type	M30 x 1,5
Place of sensing element	internal
Colour	white to RAL 9010
Temperature scale	Marked in numbers
Lockable versions	Security lock can only be removed with special tool (WT100MIL) and is reusable.

Radiator Valve Actuator				
Model Number	Temp. Range	Lockable	Closing Period	Features
T1002W0 <i>Replaces T100M-364</i>	6 to 26°C 0 setting is 1°C	No	20 Minutes	Red economy button Frost protection marked * at 7°C
T100MMIL-101	20°C fixed	Yes	20 Minutes	Theft protected
T100MMIL-231	7 to 20°C	Yes	20 Minutes	Theft protected Frost protection marked * at 7°C
T100MMIL-241	7 to 22°C	Yes	20 Minutes	Theft protected Frost protection marked * at 7°C
T100MMIL-251	7 to 24°C	Yes	20 Minutes	Theft protected Frost protection marked * at 7°C



- **Designer thermostatic radiator valve head with internal sensing element. Equipped with chrome-plated dome.**

Other colour options are available including black/chrome chrome/chrome and brushed/brushed.

Deluxe Radiator Valve Actuator				
Model Number	Temp. Range	Lockable	Closing Period	Features
T4021	6 to 26°C	No	20 Minutes	Chrome plated Frost protection marked * at 6°C
T4021V1	6 to 26°C	Yes	20 Minutes	As above

Thermostatic Radiator Valve Actuators



- Thermostatic radiator valve head with remote liquid-filled sensing element and setting unit.

Ideal for under floor convectors and enclosed radiators.

Capillary 2m

T100 Series Remote Setting Radiator Valve Actuator

Model Number	Temp. Range	Lockable	Closing Period	Features
T100MZ-2512	7 to 27°C	No	25 Minutes	Frost protection marked * at 7°C



- Thermostatic radiator valve head with remote air sensing element

Capillary 2m

Remote Air Sensor Radiator Valve Actuator

Model Number	Temp. Range	Lockable	Closing Period	Features
T100MF-3642	7 to 27°C 0 setting is off	No	20 Minutes	Red economy button Frost protection marked * at 7°



- Thermostatic radiator valve head with remote sensing element.

Pocket mounted or direct water immersions with gland seal sensing bulb. Ideal for hot water storage tanks and heat exchangers.

Max. flow temp. 120°C
Max. pressure 10 bar
Max differential pressure 1.2 bar
Capillary 2m

Remote Water Sensor Radiator Valve Actuator

Model Number	Temp. Range	Lockable	Time Constant	Features
T100R-AA	10 to 50°C	No	10 Sec.	½" 115mm pocket
T100R-AB	30 to 70°C	No	10 Sec.	½" 115mm pocket
T100RS-DA	10 to 50°C	No	5 Sec.	Fast response, immersion sensor, ½" 214mm
T100RS-DB	30 to 70°C	No	5 Sec.	Fast response immersion sensor, ½" 214mm

Thermostatic Radiator Valves



- **Low-noise thermostatic radiator valve. For water-based heating systems. Exchange of valve insert possible when system is under pressure and operating.**

Materials	Valve housing made of matt nickel-plated red bronze Rg5 to DIN 1705, valve insert made of brass with EPDM O-rings and seat sealing, spindle made of stainless steel.
Approvals	EN215
Media	water
pH-range	8 ... 9,5
Media temperature	2 ... 130 °C
Static pressure	PN10
Max. delta P	1 bar
Closing dimension	11,5 mm
Stroke	2,5 mm
Body to head connection type	M30 x 1,5
Pre-settable	no
Place in installation	supply
Port connection type	internal and external threads
Threads type	BSP

Thermostatic Radiator Valves				
<i>Model Number</i>	<i>Size</i>	<i>Kvs</i>	<i>Type</i>	<i>Actuators</i>
V2000DSL15	½"	1.4	Straight	T100 & T200
V2000DSL20	¾"	1.4	Straight	T100 & T200
V2000ABB15	½"	0.62	Axial	T100 & T200
V2002EUB15	½"	1.85	Angle	T100 & T200
V2000EUB20	¾"	1.95	Angle	T100 & T200
V2000LVS15	½"	1.0	Corner Angle Radiator connection on left	T100 & T200
V2000RVS15	½"	1.0	Corner Angle Radiator connection on right	T100 & T200

Manual Radiator Valves



- **Manual radiator valve. For water based one and two-pipe heating systems.**

Materials	Valve housing made of nickel-plated red bronze. Valve insert made of brass with EPDM O-rings. Handwheel made of white plastic. Threaded tailpiece and connection nut made of nickel-plated brass
Place in installation	supply
Media	water
Media temperature	2 ... 90 °C
Static pressure	PN10
Closing dimension	11,5 mm
Body to head connection type	M30 x 1,5
Pre-setting	no

Manual Radiator Valve				
<i>Model Number</i>	<i>Size</i>	<i>Kvs</i>	<i>Type</i>	
V2652D0015	½"	1.8	Straight	
V2652D0020	¾"	2.2	Straight	
V2652E0015	½"	1.8	Angle	
V2652E0020	¾"	2.3	Angle	

Lockshield Valves



- **Lockshield valves**

Pre-settable radiator lockshield valve for the return with shut-off facility. Optional flow direction. Supports draining and filling. Reproducible pre-setting is not affected by draining process. O-ring spindle seals. For water-based heating systems.

Materials	Valve body made of nickel-plated red bronze. Valve insert made of brass with EPDM O-rings. Protection cap made of nickel-plated brass. With nickel-plated tailpiece
Shut-off facility	yes
Pre-setting	yes
Draining/filling support	yes
Measuring support	no
Place in installation	return
Media	water
Media temperature	2 ... 130 °C
Static pressure	PN10

Lockshield Valves				
<i>Model Number</i>	<i>Size</i>	<i>Kvs</i>	<i>Type</i>	
V2400D0015	½"	1.45	Straight	
V2400D0020	¾"	1.5	Straight	
V2400E0015	½"	1.7	Angle	
V2400E0020	¾"	1.7	Angle	

Filling Valves



VF04

- **Filling valve for closed heating systems**

The filling valves permit simple and safe filling or refilling of closed heating systems. A pressure reducing valve, a check valve and a shut-off facility are combined into one unit. The pressure gauge connection enables fitting of a pressure gauge (accessory) to provide accurate checking of system pressure after filling. For closed heating systems to DIN 4751:

For use:

Onto a heating circuit distributor manifold,
In combination with a water supply distributor manifold,
On a heating boiler via a fill hose, in the supply to or directly onto a heating boiler,
As a filling set for trouble-free and safe initial filling of a system.

Approvals	DIN/DVGW approved check valve
Materials	Brass housing dezincification resistant, high grade synthetic material spring bonnet, fibre-reinforced NBR diaphragm, NBR seals
Media	water
Max. media temperature	70 °C
Static pressure	PN16
Pressure setpoint range	VF04 1,5 to 6 bar VF06 0.5 to 3 bar
Product description	With internal and external threads VF06 includes tail piece

Filling Valves				
Model Number	Size	Pressure Setpoint		Features
VF04-1/2E	1/2"	1.5 to 6 bar		R 1/2" internal and R 3/4" external threads
VF06-1/2B	1/2"	0.5 to 3 bar		With threaded union connector

Thermostatic Mixing Valve



- **TM200 thermostatic mixing valve with scald protection**

Thermostatic mixing valve for water temperature control.

Medium	Water
Operating pressure	Max. 10 bar
Max. pressure difference	2.5 bar between hot and cold inlet supplies
Hot water inlet temp.	Max. 90 °C
Connection size	R 3/4 inch
Setting range	30°C to 60°C
Factory set point	40°C
Flow rate at 1.0 bar diff.	27 l/min
Control accuracy	< ± 4°K

TM200 Mixing Valve				
Model Number	Size	Temp. Setpoint	Factory Set	Features
TM200-3/4A	3/4 in.	30°C to 60°C	40°C	Scold protection

Automatic Air Vents



- **Automatic air vent**

The E121 air vent is a reliable automatic venting device and is suitable for venting air or gas from heating systems or heat process installations. For hot water heating systems, radiators, wall- and ceiling-mounted air heaters, air collection vessels, pipe work circuits, boilers and air separators. Not suitable for mineral oil or liquids with mineral-oil based additives.

Materials	Brass housing and lid, high-grade plastic float, heat-resistant elastomer seal components
Media	water
Max. media temperature	110 °C
Static pressure	PN10
Port connection type	external threads
Option	Z121-3/8A & Z121-1/2A shut-off valve allows cleaning or replacement of the seal and inner components with out draining the system. Screws in the bottom of the E121.

Automatic Air Vent				
Model Number	Connection	Max. Pressure		Features
E121-3/8A	3/8"	10 bar		Brass housing
E121-1/2A	1/2"	10 bar		Brass housing



- **Automatic air vent**

The EA122 air vent is a reliable automatic venting device and is suitable for venting air or gas from heating systems or heat process installations. For hot water heating systems, radiators, wall- and ceiling-mounted air heaters, air collection vessels, pipe work circuits, boilers and air separators.

Materials	Brass connections, high-grade plastic float, float housing and lid, heat-resistant elastomer seal components
Media	water
Max. media temperature	110 °C
Static pressure	PN6
Port connection type	external threads
Additional description	Integrated shut-off facility. Expanding discs to prevent leakage. Integrated vacuum break. Cleaning and replacement of seal and inner components can be carried out without draining the system.

Automatic Air Vent				
Model Number	Connection	Max. Pressure		Features
EA122-BA	1/4" & 3/4"	6 bar		Brass connections

Pressure Reducing Valves



- **Pressure reducing valve with set point scale**

D06F pressure reducing valves protect household water installations against excessive pressure from the supply. They can also be used for industrial or commercial applications within the range of their specification. By installing a pressure reducing valve, pressurisation damage is avoided and water consumption is reduced. The set pressure is also maintained constant, even when there is wide inlet pressure fluctuation. Reduction of the operating pressure and maintaining it at a constant level minimises flow noise in the installation.

Approvals	DVGW, Up to size 1 1/4" approved for low noise, Group 1 without limitations
Media	Water and other non-aggressive liquids, compressed air, nitrogen
Body material	brass, dezincification resistant
Spring bonnet material	synthetic material
Port connection type	external threads
Static pressure	PN25
Integral filter	0,16 mm
Pressure setpoint range	1,5 ... 6 bar
Setpoint scale	yes
Balanced seat design	yes
Additional description	<p>The outlet pressure is set by turning the adjustment knob</p> <p>The set pressure is directly indicated on the set point scale</p> <p>The adjustment spring is not in contact with the potable water</p> <p>The valve insert is of high quality synthetic material and can be fully exchanged</p> <p>Easily retrofittable to convert valve to a reverse-rinsing filter combination</p> <p>Reliable and proven in millions of applications</p> <p>Not suitable for mounting in direct sun light</p>

Pressure Reducing Valves				
<i>Model Number</i>	<i>Size</i>	<i>Pressure Set Point</i>	<i>Kvs</i>	<i>Features</i>
D06F-1/2B	1/2"	1.5 to 6 bar	2.4	Brass filter bowl Threaded male connections
D06F-3/4A	3/4"	1.5 to 6 bar	3.1	Clear filter bowl Threaded male connections

Diaphragm Safety Valves



- Diaphragm safety valve for closed heating and solar installations

The SM120 diaphragm safety valve provides the last line of security for heating systems if the prescribed safety controls fail. In an emergency they must therefore have the capacity to discharge the whole contents of a cylinder in the form of steam. In normal system use they do not come into operation. For hydronic heating systems to DIN 4751.

Approvals	Construction tested to TRD 721
Materials	Brass housing and spring bonnet with hot water resistant elastomer diaphragm and seal disc; quality plastic venting knob
Media	Water
Max. media temperature	120 °C
Port connection type	Internal threads

Diaphragm Safety Valves				
Model Number	Size	Pressure Set Point	Plant Output	
SM120-1/2A	1/2"	2.5 bar	50 kW	
SM120-3/4A	3/4"	2.5 bar	100 kW	
SM120-1/2B	1/2"	3 bar	50 kW	
SM120-3/4B	3/4"	3 bar	100 kW	
SM120-1B	1"	3 bar	200 kW	

Under-floor heating control sets

New



- Under-floor heating control sets for in wall installation

The under-floor heating sets are used to control under-floor heating loops with or without additional radiator. The RTL-Set limits the return temperature of an under-floor heating loop in combined under-floor/radiator heating systems. The thermostat is set between 20 and 50°C depending on the desired return temperature. It is available with visible or concealed thermostat (concealed model shown in the picture with an open cover). The RTL-Set with the concealed thermostat is set only once whereas the setting of the visible thermostat can easily be changed anytime.

When the return flow temperature rises the valve closes and the flow through the heating loop is throttled. When the return flow temperature decreases the valve opens and the flow increases. The function of the Room Control-Set is identical except for the control mode. The thermostat senses the ambient room temperature and controls the flow of the medium through the heating loop accordingly.

Medium	Heating water, quality to VDI 2035
pH value	8 - 9.5
Operating pressure	Max. 10 bar (145 psi)
Differential pressure	Max. 1 bar (14.5 psi)

Under-floor Heating Control Sets				
Model Number	Thermostat	Set Point Range	Kvs	Type
T6102AUB15	Concealed	20 to 50°C	1.7	Return limit
T6102RUB15	Visible	20 to 50°C	1.0	Return limit
T6101RUB15	Visible	6 to 28°C	1.0	Room control

Automatic Bypass and Differential Pressure Valve



DU146

- Automatic bypass and differential pressure valve

The DU145 automatic bypass and differential pressure valve is used to maintain a constant differential pressure in a heating system. It reduces flow noise in a system, particularly as thermostatic radiator valves are closed. The boiler return temperature is raised and this reduces corrosion caused by flue gas condensation. In addition, when radiator valves are closed it also maintains flow over the temperature sensor on the boiler to ensure proper operation of external temperature compensation controls. On gas-fired water heaters it guarantees a minimum flow circulation when thermostats or radiator valves are closed. For pump-driven warm water heating systems, e.g.:

On heating systems with three-way or four-way mixing valves, or

On gas-fired hot water circulation heating systems.

Materials	Brass housing and fittings, plastic spring bonnet assembly and valve disc, stainless steel spring, EPDM seals
Body pattern	angle
Media	water
Max. media temperature	110 °C, M version 130°C
Max. operating pressure	3 bar, M version 16 bar

Automatic Bypass and Differential Pressure Valve				
Model Number	Size	Pressure Set Point	Plant Output	Features
DU145-3/4A	3/4"	0.1 to 0.6 bar	70 kW	No sight glass
DU146-3/4A	3/4"	0.05 to 0.5	70 kW	Sight glass
DU146-11/4A	1 1/4"	0.05 to 0.5	232 kW	Sight glass
DU146M-3/4A	3/4"	0.05 to 0.5	70 kW	Brass housing No sight glass
DU146M-11/4A	1 1/4"	0.05 to 0.5	232 kW	Brass housing No sight glass

Combustion Regulator



- Combustion regulator for solid fuel and multi-fuel burners

FR124 combustion regulator opens closes the air intake flap of solid fuel burners in proportion to the flow temperature. For solid fuel and multi-fuel heating installations to DIN 4751.

Materials	High-quality plastic housing and adjuster knob with brass sensor pocket, chain and nickel-plated steel lever rod.
Media	water
Max. media temperature	115 °C
Product description	Connection size G 3/4", chain length 1 m
Additional description	Setting range 30 to 90°Celsius

Solid Fuel Boiler Regulator				
Model Number	Connection	Range		Features
FR124-3/4A	3/4"	30 to 90°C		1m chain

Combustion Controls



- **7800 series microprocessor based integrated burner control.**

Microprocessor-based integrated burner control for full modulation applications. Provides automatic burner sequencing, flame supervision, system status indication, system or self-diagnostics, and troubleshooting.

Features

Access for external electrical voltage checks.

Application flexibility and communication interface capability.

Five LED's provide sequence information.

Run/Test Switch.

Interchangeable plug-in amplifiers.

Local or remote annunciation of operation and fault information (optional).

Non-volatile memory retains history files and lockout status after loss of power.

Compatible with existing Honeywell flame detectors.

Order Amplifier, Purge Timer Card, Sub Base, & Optional components separately

7850 Burner Controller				
<i>Model Number</i>	<i>Electrical</i>	<i>Pilot & Main Trial Time</i>	<i>Post Purge</i>	<i>Features</i>
EC7850A1072	220-240 VAC 50/60 Hz	3 or 5 sec.	2 sec.	Optional Modbus communication
EC7850A1122	220-240 VAC 50/60 Hz	3 or 5 sec	15 sec.	As above
RM7850A1019	120 VAC 50/60 Hz	3 or 5 sec	15 sec.	As above
Q7800A1005	Wiring & mounting base			Access for voltage checks on terminals



- **7800 series microprocessor based flame switch.**

Microprocessor-based integrated flame switch for detecting a flame using rectification, ultraviolet (UV) or infrared (IR) source. Provides level of safety, functional capability and features beyond conventional controls.

Features

Three LEDs to indicate power, flame and alarm.

Access for external electrical voltage checks.

Nonvolatile memory.

Compatible with existing Honeywell flame detector

Order Amplifier, Sub Base, & Optional components separately

7800 Flame Switch				
<i>Model Number</i>	<i>Electrical</i>	<i>Flame Failure Response Time</i>	<i>Output</i>	<i>Features</i>
EC7823A1004	220-240 VAC 50/60 Hz	0.8 or 3 sec.	2 x SPDT	Optional Modbus communication
RM7823A1016	120 VAC 50/60 Hz	0.8 or 3 sec.	2 x SPDT	As above
Q7800A1005	Wiring & mounting base			Access for voltage checks on terminals

Combustion Controls



- 7800 series amplifier**

Solid state plug-in amplifiers that respond to flame detector inputs to indicate the presence of flame when used with 7800 Series relay modules.

Features

Flame signal strength ranges from 0.0 to 5.0 Vdc.

Flame signal test jacks to measure amplifier flame signal voltage.

Color-coded labels identify flame detection type:

Dynamic Self-Check Amplifier test the detectors and all electronic components in the flame detection system; 7800 Series relay module locks out on safety shutdown with flame detection system failure.

7800 Amplifiers				
<i>Model Number</i>	<i>Flame Failure Response Time (FFRT) EC7800</i>	<i>FFRT RM7800</i>	<i>Flame Detector</i>	<i>Features</i>
R7847A1025	1.0 sec.	0.8 sec.	Flame Rod & photocells	
R7847A1033	2.0 sec.	3.0 sec.	Flame Rod & photocells	
R7847B1031	2.0 sec.	3.0 sec.	Flame Rod & photocells	Amplichack
R7847C1005	2.0 sec.	3.0 sec.	C7012E/F	Dynamic Self Check
R7849A1015	1.0 sec.	0.8 sec.	C7027 & C7035	
R7849A1023	2.0 sec.	3.0 sec.	C7027 & C7035	
R7849B1021	2.0 sec.	3.0 sec.	C7027 & C7035	Amplichack
R7851C1008	2.0 sec.	3.0 sec.	C7961E/F	Dynamic Self Check
R7861A1026	2.0 sec.	3.0 sec.	C7061A/F	Dynamic Self Check
R7861A1034	1.0 sec.	0.8 sec.	C7061A/F	Dynamic Self Check
R7886A1001	2.0 sec.	3.0 sec.	C7076A/D	Dynamic Self Check

- 7800 series purge timer card**



Provides pre-purge timing for select 7800 Series relay modules.

Features

Non-adjustable

Plug in

Card ranges seconds 2, 7, 10, 30, 40, 60, 90

Card ranges minutes 2.5, 4, 6, 9, 12, 15, 22, 30

7800 Purge Timer Card				
<i>Model Number</i>	<i>Purge Time</i>			
ST7800A1005	2 sec.			
ST7800A1039	30 sec.			
ST7800A1054	60 sec.			
ST7800A1062	90 sec.			
ST7800A1070	2.5 min.			
ST7800A1088	4 min.			
ST7800A1096	6 min.			
ST7800A1146	30 min.			

Combustion Controls



- S7800 series keyboard display module with Modbus communication**

Provides current status of burner sequence, timing information, hold information and lockout information, as well as selectable or pre-emptive messages.

Features

Flame signal strength, 0 to 5 Volts.

ModBus communication .

First-out annunciation and system diagnostics provided by 2 row by 20 column.

Vacuum Fluorescent Display.

Local or remote annunciation of operation and fault information.

Remote reset.

S7800 Keyboard Display

<i>Model Number</i>	<i>Description</i>			<i>Features</i>
S7800A1001	Display includes Flame signal & Fault information			Modbus communication Remote reset input



- S7800 series keyboard display accessories**

Mounting and electrical accessories for the S7800 display.

S7800 Keyboard Display Accessories

<i>Model Number</i>	<i>Description</i>			<i>Features</i>
204718A	Panel mount clear cover			NEMA 4
204718C	Panel mount clear cover with reset button			NEMA 4 Shown above
203765	Surface mounting bracket			Metal
221818A	1524 mm extension cable for remote mounting S7800			No additional power supply required

Combustion Controls



- **Digital Burner Control DBC2000**

The DBC2000 is a microprocessor-based integrated burner controller for automatically fired gas, oil or combination fuel industrial single burner power burner applications. The DBC2000 system consists of the relay module and wiring sub base.

The Standard Model provides the minimum requirements to control an industrial burner system; the Enhanced Model includes an integrated Valve Proofing System; the Ultimate model includes bus communication on top of this.

For all type of burners with unlimited capacity using intermittent operation an integrated timer assures an automated recycle sequence after 24h uninterrupted heat demand.

Features

Approvals

AGA pending. CE approved according EN298 for intermittent operation

Flame Failure Response

E models less than 1 sec, G model less than 2 sec

Timer

Integrated 24h auto recycle timer

Outputs

HF/LF/Modulate

Operation

24h auto-recycle

Ignition operation

Selectable Pilot or Direct Main Burner

Pilot Selectable

Intermittent / interrupted

Pilot ignition time

3 seconds

Main ignition time

3 seconds

Post purge time

Selectable 15 or 0 seconds

Flame detector

Selectable UV/FR (internal amplifier)

UV sensor family

C7027/35/44 (UV)

UV sensor family

C7012A/G (FR)

IR sensor family

IRD820/1020 (FR)

DBC2000 Burner Controller

<i>Model Number</i>	<i>Electrical</i>	<i>Prepurge Time</i>	<i>Valve Proving</i>	<i>Features</i>
DBC2000E1018	230 VAC	35 sec.		
DBC2000E1026	230 VAC	3 sec.		
DBC2000E1034	230 VAC	60 sec.		
DBC2000E2019	230 VAC	35 sec.	Yes	
DBC2000E3010	230 VAC	35 sec.	Yes	Modbus slave comm.
DBC2000G1001	230 VAC	3 sec.		< 2 sec Flame Failure Response Time
DBC2000E1000	115 VAC	35 sec.		
DBC2000E2001	115 VAC	35 sec.	Yes	
DBC2000E3002	115 VAC	35 sec.	Yes	Modbus slave comm.
50054368-003				Sub base for DBC

Valve Proving



- **A4021 self-checking Valve Proving System**

The A4021 is a self-checking microprocessor based Valve Proving System (VPS). The A4021 checks the effective closure of automatic shut-off valves by measuring the pressure differential between two valves during the test sequence.

The A4021 is specially designed to be used as proving system to check the effective closure of the valves before burner start up (pre-configuration) or at the end of a heat demand (post-configuration).

Uses the NO contact of a standard gas pressure switch that is set to 1/2x the nominal inlet pressure.

Features

Approvals:	AGA. CE approved (50Hz) according EN1643 (PIN: CE-0063AS1822)
Protection class:	IP40, only with sub base ZL030001
Ambient temperature:	-10 to 60C
Remote reset.	Yes
Alarm output	Potential free NO contact.
Operation:	Automatic
Runtime:	60s

A4021 Valve Proving System

<i>Model Number</i>	<i>Description</i>	<i>Voltage</i>		<i>Features</i>
A4021A1002	Valve proving controller	230 VAC		AGA Certified
A4021A1010	Valve proving controller	115 VAC		AGA Certified
ZL030001	Wiring sub base			Required for A4021

New

Flame Switch



- **Honeywell IRIS P520 Industrial Flame switch & transmitter**

The IRIS Model P520 is a state of the art flame signal processor. It is designed to be used with the IRIS S5xx, S55x and S55xB series Viewing Heads.

In addition to the four LED's on the front panel, a digital readout and bar graph provide constant and concise information on the system status.

The front panel also provides a number of controls for setting up and operation of this microprocessor based flame monitoring signal processor.

Features

- Analog bar graph flame signal display
- 4-Digit digital flame signal display
- Fail-safe self-checking
- Digital set points for Flame On and Flame Off
- Adjustable Flame Out time delay
- Adjustable Flame On time delay
- Separate analog and digital signal processors 0-20mA or 4-20mA current driven output for an analog remote meter
- Two complete sets of set points, gain settings and time delays that can be programmed locally or remotely and can be selected remotely
- Viewing head switching relay for igniter/main burner
- Serial communication capability using RS-422 or RS-232 with a host computer for data acquisition and complete remote programming
- Self-checking relay contacts available for DCS
- Easy installation brackets and rear mounted wiring terminals
- Operates on 24VDC power or 24VDC backup

P520 Flame Switch				
Model Number	Electrical	Flame Failure Response Time	Output	Features
P520	24VDC	Adjustable	Relay & 4-20mA	Fail safe self checking



- **Honeywell IRIS UV/IR flame scanner viewing head for S550B, S552B and S556B flame monitors.**

The IRIS Model S550 is an advanced flame monitor viewing head utilizing two types of detectors, an IR (infrared) solid state and UV (ultra violet) tube.

Features

- Adjustable gain
- Flame strength LED pulse indicator
- Order cable separately per foot, model C328 (4 Conductor detector cable with shield)

S550B Flame Scanner				
Model Number	UV Gain	IR Gain	Filter Range	Features
S550B	0-99	0-699	1-8	Flame strength LED

Contact your Honeywell distributor for details on the full range of IRIS products

New

Flame Switch



- BC1000 Flame Switch & manual stop/start controller**

Flame switch for use with rectification (flame rod or C7012A/G) or UV Minipeeper flame detectors. BC1000A/B provides a Safe Start function which checks if a flame signal is present when applying power to the device. BC1000A can be used as a primary control for manually operated burner systems using a start/stop station.

Features

Includes surface or DIN rail mount wiring sub base model 50054373-002

Flame indicator & power light

Flame voltage measurement points

BC1000 Flame Switch

<i>Model Number</i>	<i>Electrical</i>	<i>Flame Failure Response Time</i>	<i>Application</i>	<i>Flame Sensor</i>
BC1000B1018	230 VAC	< 1 sec.	Flame Relay SPDT	Rectification
BC1000B2019	230 VAC	< 1 sec.	Flame Relay SPDT	C7027, C7035 & C7044
BC1000B1000	115 VAC	< 1 sec.	Flame Relay SPDT	Rectification
BC1000B2001	115 VAC	< 1 sec.	Flame Relay SPDT	C7027, C7035 & C7044
BC1000A0220F	230 VAC	2 sec.	Manual stop/start	Rectification
BC1000A0220U	230 VAC	2 sec.	Manual stop/start	C7027, C7035 & C7044
BC1000A0110F	115 VAC	2 sec.	Manual stop/start	Rectification
BC1000A0110U	115 VAC	2 sec.	Manual stop/start	C7027, C7035 & C7044



- Flame switch**

Flame switch for use with rectification or Honeywell UV Minipeeper flame detectors.

Features

Includes Q643B wiring sub base

Flame indicator light

R4343 Flame Switch

<i>Model Number</i>	<i>Electrical</i>	<i>Flame Failure Response Time</i>	<i>Output</i>	<i>Flame Sensor</i>
R4343D1017	220 VAC 50 Hz	< 1 sec.	2 x SPDT	Rectification
R4343E1014	220 VAC 50 Hz	< 1 sec.	2 x SPDT	C7027, C7035, C7044
R4343E1006	110 VAC 50 Hz	< 1 sec.	2 x SPDT	C7027, C7035, C7044

Ignition Module



- **S8610U ignition module**

One or Two Rod Intermittent Pilot Control with continuous retry trial time with configurable lockout timing of 15 or 90 seconds and configurable pre-purge of 30 seconds or no pre-purge.

Provides ignition sequence, flame monitoring and safety shutoff for intermittent pilot central furnaces and heating appliances. 100 percent pilot gas shutoff if pilot fails to light; after 6-minute delay, trial for ignition is repeated. Ignition trial/delay sequence is repeated until the appliance lights or call for heat is removed.

For use with Natural or LP gas.

For use in single rod or dual rod/remote sense applications. Includes relay contacts for use with any intermittent pilot gas control string with maximum 1.0A pilot or 2.0A main valve rating; Honeywell VR8204, VR8304 or VR8345M combination gas control recommended. Functional equivalent of S86, S8600, S8610 and S90 modules.

Includes spark cable adapters to allow field replacement of both Honeywell and competitive controls without replacing existing spark cable.

S8610U Ignition Module				
Model Number	Electrical	Flame Failure	Flame Sensor	Features
S8610U3009	24 VAC 50/60 Hz	15 or 90 sec.	Rectification	Status LED

Ignition Transformer



- **S720 Solid state ignition transformer**

The S720 is a solid state ignition transformer for oil or gas burners.

Features

Duty cycle	33% (1 minute on and 2 minutes off)
Life	100 000 cycles or 10 years
Ambient temp.	-10 to 60°C
Ambient R.H.	Max. 90% RH at 40°C
Terminals	Woodscrew type

S720 Ignition Transformer				
Model Number	Electrical Supply	Output	Duty Cycle	Application
S720A1065	220 VAC 50/60 Hz	2 x 8K Volts	33%	Oil
S720A1156	220 VAC 50/60 Hz	1 x 16K Volts	33%	Gas

Combustion Flame Sensors

- **Flame rod**



The small size of these devices enable their application to flame detection in installations where space is limited. The holder and flame rod assemblies facilitate flame proving on gas burners or gas-ignited oil burners which are controlled by electronic flame safeguard systems.

Features

Use with Honeywell Flame Safeguard controls requiring rectification-type flame detection.

Use only with gas.

Install with or without cover.

Comes in several different lengths and can be cut to exact desired length.

Material, Kanthal, 1200°C max.

Uses Rajah electrical connector.

C7008 Flame Rod				
<i>Model Number</i>	<i>Length mm</i>	<i>Cover</i>	<i>Fuel</i>	
C7008A1018	305	Yes	Gas only	
C7008A1026	457	Yes	Gas only	
C7008A1182/U	610	Yes	Gas only	

Combustion Flame Sensors



- Flame Sensor, Ultraviolet, Minipeeper**

Compact flame detector for use with flame safeguard controls with ultraviolet amplifiers.

Features

C7027 mounts on a 1/2 in. sighting pipe by using an integral collar.

Detectors can be wired in parallel for difficult sighting applications.

C7027 seals against pressures as high as 5 psi (34.5kPa) when correctly installed.

C7027 UV Minipeeper

<i>Model Number</i>	<i>Mounting</i>	<i>Ambient Temp.</i>	<i>Lead Wire</i>	<i>Features</i>
C7027A1049	1/2"NPT	-18 to 102°C	2438mm	End view Shown above
C7044A1006	Bracket provided	-18 to 102°C	1829mm	Side view



- Flame Sensor, Ultraviolet, Minipeeper**

Compact flame detector for use with flame safeguard controls with ultraviolet amplifiers.

Features

Protects the sensing tube with a shield.

Meets outdoor rain tight requirements of Underwriters Laboratories Inc., NEMA 4 and NEMA 4X.

Wires in parallel for difficult sighting applications.

Seals against pressures as high as 5 psi (34.5 kPa) when correctly installed.

Field-replaceable ultraviolet sensing tube. Mode 129464M

C7035 UV Minipeeper

<i>Model Number</i>	<i>Mounting</i>	<i>Ambient Temp.</i>	<i>Lead Wire</i>	<i>Features</i>
C7035A1023	1"NPT	-18 to 121°C	1829mm	Replaceable Tube



- Flame Sensor, Ultraviolet, Purple Peeper, Self-Checking**

Dynamic self-checking flame detector used with R7861 Dynamic Self-check Amplifiers for sensing the ultraviolet radiation generated by the combustion of gas, oil, or other fuels.

Features

Oscillating shutter interrupts ultraviolet radiation reaching the UV sensor 12 times per minute to provide the UV sensor tube checking function.

Field replaceable ultraviolet radiation sensing tube and quartz viewing window.

Two detectors can be wired in parallel to reduce nuisance shutdowns in difficult flame sighting applications.

Parts, UV tube 129464M, Lens 114372, Shutter assembly 190971E

C7061 UV Purple Peeper

<i>Model Number</i>	<i>Mounting</i>	<i>Ambient Temp.</i>	<i>Lead Wire</i>	<i>Features</i>
C7061A1020	3/4"NPT	-40 to 79°C	2438mm	120 or 230 VAC
C7061F1003	3/4"NPT	-20 to 70°C	Terminal block	Explosion proof EExd IIC T6 230 VAC

Combustion Flame Sensors



- **Flame Sensor, Ultraviolet, Adjustable Sensitivity. The “Problem Solver”. Ideal for difficult to sense fuels and applications.**

The C7076 Adjustable-sensitivity Ultraviolet Flame Detector has been designed and configured for demanding single- or multiple-burner, multiple-fuel boiler and process applications. It is the most advanced, most capable flame detector available. The detector tube used in the C7076, a product of Honeywell research, is 20 times more sensitive than the conventional ultraviolet tube.

Features

Exceptional sensitivity for Honeywell Flame Safeguard primary safety controls requiring adjustable sensitivity ultraviolet flame detection.

Dynamic self-checking safety.

Includes dual sensitivity adjustment .

Remote switching between sensitivities.

Suitable for Carburetted water gas, Carbon monoxide (CO), Coal gas, Ethane (C₂H₆), Pulverized coal, Ethylene (C₂H₄), Coke oven gas, Hydrogen (H₂), Natural gas, Hydrogen (H₂ + O₂), Naphtha, Hydrogen sulfide (H₂S), Refinery oil liquid/vapor/refined sewage gas & Methane (CH₄) & Propane (C₃H₈).

C7076 UV Purple Sensor				
<i>Model Number</i>	<i>Mounting</i>	<i>Ambient Temp.</i>	<i>Power Supply</i>	<i>Features</i>
C7076A1031	1”NPT	-40 to 79°C	240 VAC 50Hz	Shown above
C7076A1015/U	1”NPT	-40 to 79°C	100 VAC 50Hz	Shown above
C7076F1006	1”NPT	-40 to 79°C	230 VAC 50Hz	Explosion proof EExd IIC T6
C7076F1014	1”NPT	-40 to 79°C	120 VAC 50Hz	Explosion proof EExd IIC T6

- **30 mV thermocouple with 11/32 32 male connector nut connection.**



Thermocouples generate a thermoelectric current that senses a pilot flame on gas-fired heating systems. The pilot flame heats the tip of the thermocouple, producing a temperature differential between it and the base. This temperature difference generates a small amount of DC power, measured in mille-volts. Used with combination gas valves.

Features

Available in a variety of lead lengths.

Q340 Thermocouple Flame Sensor				
<i>Model Number</i>	<i>Length</i>			
Q340A1074	609mm 24in.			
Q340A1090	914mm 36in.			
Q340A1108	1219mm 48in.			

Combustion Fuel Air Ratio Control



- **ControLinks Fuel Air Ratio Control**

Uses the latest microprocessor-based technology to simultaneously control up to four actuators. When used with the ML7999 Universal Parallel Positioning Actuators, represents a value-added replacement of mechanical cam and linkage assembly controlling the relationship between fuel, airflow and flue gas recirculation (if used) on a power burner.

Features

Fast burner setup via PC or optional S7999 display.
 Two independent fuel profiles with or without FGR.
 7 to 24 point profiles.
 Programmable behaviours of all actuators during Purge and Standby.
 Programmable behaviour of non-selected fuel actuator.
 Independent light off and minimum modulation positions.
 Auto/Manual input.
 Manual mode firing rate input.
 Multipurpose communications port.
 Integrated boiler shock protection algorithms: Water temperature low fire hold.
 Stack temperature low fire hold. FGR and low fire hold.
 Selectable FGR hold based on stack temperature.
 Programmable behaviour of FGR actuator during purge.
 Maximum modulation limit capability.
 Remote reset input.
 Automated actuator endpoint seeking process.

Controlinks Fuel Air Ratio Control				
<i>Model Number</i>	<i>Description</i>			<i>Features</i>
R7999B1003	ControLinks fuel air ratio controller			240 VAC
Q7999A1006/U	Sub base for R7999			
ML7999A2001/U	Actuator for fuel or air			11.3 Nm Direct coupled Programmable positioning accuracy
ZM7999A1006/U	Programming software			Easy to use set up wizard RS232 to RS485 converter required
S7999B1000	Optional touch screen display for programming and monitoring			Communicates with ControLinks 7800 burner controls UDC2500/3500 controllers
DSP3822/U	Optional S7999 touch screen display in a portable case			Avoids the need to take a lap top into boiler rooms during commissioning

Combustion Pressure Switch.



- **Pressure switch for use with natural gas, liquid propane (LP) gas, or air.**

Pressure Switches are safety devices used in positive-pressure or differential-pressure systems to sense gas or air pressure systems.

Features

Diaphragm-actuated safety-limit switch.

C6097A models break control circuit at set point on pressure fall.

C6097B models break control circuit at set point on pressure rise.

Lockout with manual reset external reset button and recycle options.

Removable transparent cover protects scale plate and adjusting knob.

Flange mount models for direct mounting to Honeywell Integrated Valve Train.

IP54 enclosure standard.

Surge orifice.

Electrical 240 VAC, 3.0A, SPDT switch.

C6097 Gas Air Pressure Switch

<i>Model Number</i>	<i>Range</i>	<i>Low Scale Diff.</i>	<i>High Scale Diff.</i>	<i>Action</i>
C6097A1012	3 to 21" W.C.	2.4" W.C.	4.2" W.C.	Manual reset Break on fall
C6097A1053	3 to 21" W.C.	0.24" W.C.	0.42" W.C.	Auto recycle Break on fall
C6097B1002	12 to 60" W.C.	10.0" W.C.	12.0" W.C.	Manual reset Break on rise
C6097B1085	12 to 60" W.C.	1.1" W.C.	2.4" W.C.	Auto recycle Break on rise
C6097B1051	1.5 to 7 PSI	1.1 PSI	1.4 PSI	Manual reset Break on rise
C6097B1101	1.5 to 7 PSI	0.1 PSI	0.3 PSI	Auto recycle Break on rise



- **Pressure switch for use with natural gas, or air.**

Pressure Switches are safety devices used in positive-pressure or differential-pressure systems to sense gas or air pressure systems.

Features

Switch position indicator.

Set point and switch position indicators visible from outside.

Single pole, double throw snap acting micro switch, auto recycle.

Electrical rating 220/240 VAC, 2.0A.

DIN approved.

High pressure connection 1/4" BSPPL, Low pressure connection 1/8" BSPPL.

C6045D Gas Air Pressure Switch

<i>Model Number</i>	<i>Range W.C.</i>	<i>Low Scale Diff.</i>	<i>High Scale Diff.</i>	<i>Features</i>
C6045D1043	2 to 30mm	3mm	5mm	Additive differential
C6045D1092	10 to 100mm	3mm	10mm	Mounting bracket
C6045D1076	50 to 500mm	12mm	25mm	Mounting bracket
C6045D1027	150 to 1500mm	35mm	100mm	

Safety Shut Off Gas Valve Actuator



- Fluid powered automatic safety shut off gas valve actuator

Used with V5055 & V5097 valves these actuator combinations are used for large gas burners that require tight close off and accurate control of large amounts of fuel.

Features

Use where smooth light off is important.

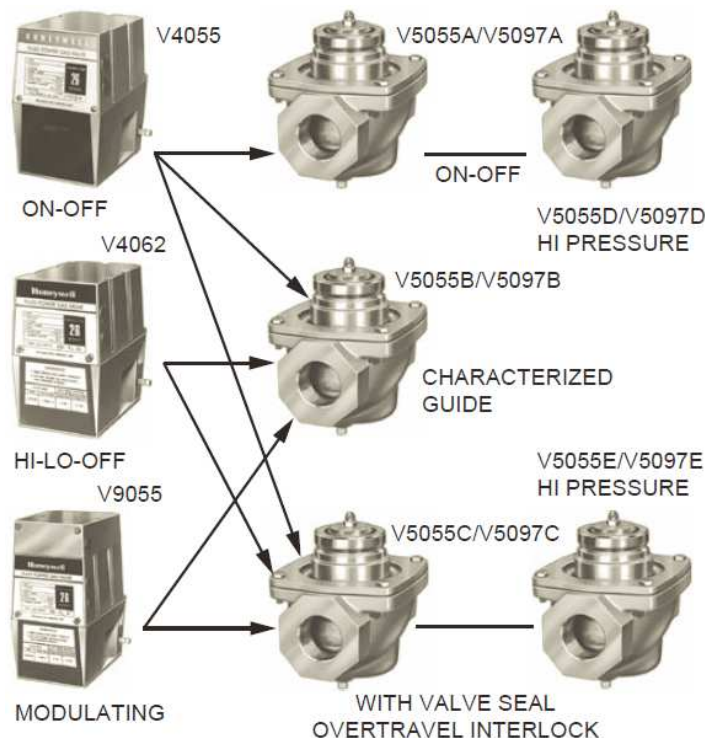
One-second maximum closing time.

Continuously displays the valve position with a red indicator when open and a yellow indicator when closed.

Mount in any position directly to valve bonnet with three setscrews.

V4055A Safety Shut Off Actuator

Model Number	Voltage	Timing	Max Differential Pressure	Features
V4055A1031	120 VAC	16 Sec.	¾ to 3 inch 5 PSI 4 inch 3 PSI	Low pressure
V4055A1239	240 VAC	16 Sec.	¾ to 3 inch 5 PSI 4 inch. 3 PSI	Low pressure
V4055A1296/U	120 VAC	16 Sec.	¾ to 3 inch 5 PSI 4 inch 3 PSI	Low pressure Internal auxiliary switch
V4055D1043	120 VAC	16 Sec.	¾ to 3 inch 5 PSI 4 inch 3 PSI	Low pressure Proof of closure switch
V4055B1039/U	120 VAC	16 Sec.	¾ to 3 inch 15 or 25 PSI 4 inch 5 PSI	High pressure Damper shaft
V4055B1096	240 VAC	16 Sec.	¾ to 3 inch 15 or 25 PSI 4 inch 5 PSI	High pressure



Safety Shut Off Gas Valves



- **Fluid powered automatic safety shut off gas valve body**

Safety shutoff valves used with V4055, V4062 and V9055 fluid power actuators to control gas flow to commercial and industrial burners.

Features

Use with natural or LP gases

Sizes ¾ to 4 inch (4 in. models have flanged connections)

Include 1/4 in. NPT upstream and downstream taps and plug

V5055 normally closed valves are rated for final shutoff service safety shutoff

V5055A,C,D,E Valves are for On-Off service

V5055B Valve has a characterized guide and in combination with the V4055, V4062, and V9055 Fluid Power Actuators, provides slow-opening, hi-lo-off, and modulating functions respectively.

V5055C,E,F Valves have a double seal and are used with V4055D,E Actuators to provide proof-of-closure switch and valve seal over-travel interlock

V5055D,E,F Valves are for high pressure applications

V5055 Safety Shut Off Gas Valve				
Model Number	Application	Pressure	Sizes	Actuators
V5055A	On/Off	Standard	¾ to 4 in.	V4055A,G,B
V5055B	Characterized Guide Slow open or Modulating	Standard	¾ to 4 in.	V4055A,G,B V4062A,B V9055A
V5055C	Valve Seal Overtravel Interlock	Standard	¾ to 4 in.	V4055D,F,E V4062A,B,D V9055D
V5055D	On/Off	High	¾ to 3 in.	V4055A,G,B
V5055E	Valve Seal Overtravel Interlock	High	¾ to 3 in.	V4055D,F,E V4062B

Contact your Honeywell distributor for V5055 model selection & maximum pressure guide

New



- **VE automatic safety shut off gas valve**

VE series class A gas valves are used for control and regulation of gaseous fluids in gas power burners, atmospheric gas boilers, melting furnaces, incinerators and other gas consuming appliances.

Normally closed and normally open versions consisting of a direct On/Off operator for opening or closing of the valve.

Voltage	220-240VAC
Sizes	3/8 to 2½ inch
Ambient temperature	-15 ... 60°C
Environmental Rating	IP54

VE Safety Shut Off Gas Valve				
Model Number	Size	Pressure	Operation	
VE4015A1005	½ in.	360 mbar	Normally closed	
VE4020A1005	¾ in.	200 mbar	Normally closed	
VE4025A1004	1 in.	200 mbar	Normally closed	
VE4032A1000	1¼ in.	200 mbar	Normally closed	
VE4040A1003	1½ in.	200 mbar	Normally closed	
VE4050A1002	2 in.	200 mbar	Normally closed	
VE4065A1000	2½ in.	200 mbar	Normally closed	

Contact your Honeywell distributor for the normally open selection guide

Satronic Burner Controls



- **Oil burner safety control TF 832.3**

The TF 832.3 oil burner safety control box is suitable to control and monitor oil power burners up to 30 kg/h capacity (approved and certified according to EN230).

Features

1 or 2-stage operation

Low voltage protection according to EN230

Order separately 75300 wiring sub base S98 9-pin

Flame Detectors (order separately)

Photoresistor MZ 770 S

Infrared-flicker detector IRD 1010.1

UV solid state sensor UVD 970

TF 832.3 Oil Burner Control

<i>Model Number</i>	<i>Designation</i>	<i>Electrical</i>	<i>Timing Seconds</i>	<i>Features</i>
02431U	TF 832.3	220/240 VAC	Pre-Purge 12 Pre-Ignition 12 Post-Ignition 2 to 5	Indirect replacement for R4440D oil burner controller



- **Burner safety control MMG810.1. For 2-stage forced draught and combi oil/gas burners**

The MMG burner control box is capable of controlling and monitoring forced draught and combi oil/gas burners of any nominal rating (tested and approved as per EN 298).

Order separately 75310 wiring sub base S98 12-pin

Flame Detectors (order separately)

Ionization probe

Infrared flicker detector IRD1020

MMG 810.1 Mod 45 Burner Control

<i>Model Number</i>	<i>Designation</i>	<i>Electrical</i>	<i>Timing Seconds</i>	<i>Features</i>
0642620U	MMG 810.1 Mod.45	220/240 VAC	Pre-Purge 40 Safety Time 5	Illuminated pushbutton

Satronic Burner Controls



- **Burner safety control DKG 972 for 2-stage atmospheric gas burners**

The burner control box DKG 972 controls and supervises atmospheric gas burners. The microprocessor-based programming sequence ensures extremely stable timings independent of voltage variations, ambient temperature and/or switch-on cycles.

The built-in information system provides a continuous monitoring of the actual state of the control box (very helpful especially for monitoring the start-up phase). The lock out cause is stored in such a way that it can be retrieved even after a power failure.

Order separately 75310 wiring sub base S98 9-pin

Flame Detectors (order separately)

Ionisation probe

Infrared flicker detector 1020.1

UV flame sensor UVD 971

DKG 972 Gas Burner Control

<i>Model Number</i>	<i>Designation</i>	<i>Electrical</i>		<i>Features</i>
0332005U	DKG 972 Mod.05	220/240 VAC		Microprocessor
0432005U	DKG 972-N Mod.05	220/240 VAC		Microprocessor



- **Burner safety control TMG 740-3 for high performance forced draught and dual fuel burners in intermittent operation (1 or two stage versions)**

The TMG 740-3 burner control box is capable of controlling and monitoring medium to high performance forced draught and dual fuel oil/gas burners in single or two stage versions. It can be used, as preferred, for multi-stage or modulating operation with burners of any nominal rating as well as in direct air heaters (as per DIN 4794).

Order separately 70205 wiring sub base

Flame Detectors (order separately)

Ionisation probe

Infrared flicker detector IRD820 or IRD1020

UV flame sensor UVZ 780

TMG 740-3 MOD 43-35 Burner Control

<i>Model Number</i>	<i>Designation</i>	<i>Electrical</i>		
08218U	TMG 740-3 MOD 43-35	220/240 VAC		

Satronic Flame Detectors



- **Photocell for oil flames MZ 770 S**

MZ 770 S is for use with Satronic oil burner controls.

Ambient temperature -20 to 60°C
Environmental protection IP41

Suitable For:
DKO 970, 972, 974, 976, 992, 996
DMO 976
DKW 974, 976
TF 830, 832, 834, 836
TF 844, 974, 976
TTO 872, 876
MMO 872, 876

MZ 770 S Photocell

Model Number	Designation	Description		
50001U	MZ 770 s	Photocell		
59101		Mounting flange		
7225001		Connection cable 0.5m		



- **UV Photocell UVZ 780**

Satronic UV sensor type UVZ 780 red, suitable for gas, oil and dual fuel burners.

UVZ 780 UV Photocell

Model Number	Designation	Description		
18813U	UVZ 780 Red	Photocell		
18807		Mounting flange		
7236001		3 wire connection cable 0.6m		

Satronic Burner Control Accessories



- **Ignition transformer for Satronic controls**

1.0 meter lead wire.

ZT812 Gas Burner Control

Model Number	Designation	Electrical		Features
1260001U	ZT812	220/240 VAC		