

DAMPER / VALVE MOTORS
0-10VDC / 4-20mA

E08..M, E16..M, E24..M, E32..M

These motors can be fitted directly onto air damper shafts or remotely using linkage accessories in HVAC systems. They are also suitable for use on control valves. The rotary operation modulates according to the 0-10vdc / 4-20mA signal in order to open and close dampers, valves etc.



E08..M E16..M E24..M E32..M

Motor stops automatically when in the end position.
Up to 5 motors can be wired in parallel.
Max. ambient -20/+50°C
Adjustable angle of rotation limiter 0-90°
Reversible position indication 0-10, 10-0
Noise level 45dB Latchable Manual Override
Supply : 24VAC ±20% 24VDC ±10% 230VAC ±10%
 24V=7.5VA 230V=6VA
Enclosure Flammability = UL94-V0
***FOR WEATHERPROOF ENCLOSURES SE SEPERATE DATA SHEET.**

Type	Supply 50/60Hz	Selectable Input	Aux Switch 230VAC	Run Time Approx	Torque	Damper Area Approx	Enclosure
E08-24M	24VAC/DC	0-10vdc/4-20mA	–	30s	8Nm	2m ²	IP44
E08-24MS	24VAC/DC	0-10vdc/4-20mA	2 x 3(1.5)A	30s	8Nm	2m ²	IP44
E16-24M	24VAC/DC	0-10vdc/4-20mA	–	80s	16Nm	4m ²	IP44
E16-24MS	24VAC/DC	0-10vdc/4-20mA	2 x 3(1.5)A	80s	16Nm	4m ²	IP44
E16-230M	230VAC	0-10vdc/	–	80s	16Nm	4m ²	IP44
E16-230MS	230VAC	0-10vdc/	–	80s	16Nm	4m ²	IP44
E24-24M	24VAC/DC	0-10vdc/4-20mA	–	125s	24Nm	6m ²	IP44
E24-24MS	24VAC/DC	0-10vdc/4-20mA	2 x 3(1.5)A	125s	24Nm	6m ²	IP44
E32-24M	24VAC/DC	0-10vdc/4-20mA	–	140s	32Nm	8m ²	IP44

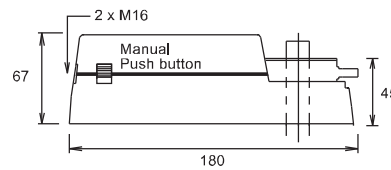
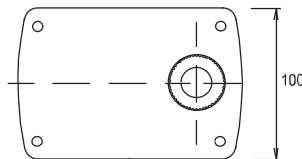
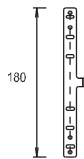
SPECIAL ORDER ONLY

DIMENSIONS

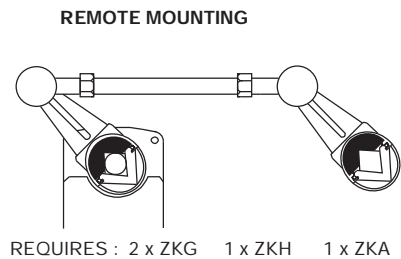
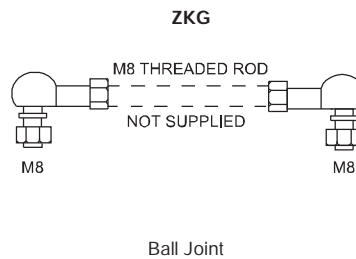
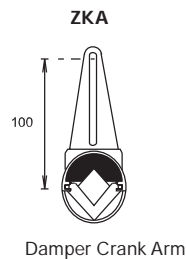
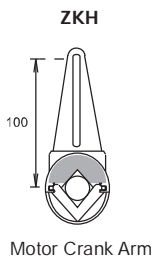
Anti-Rotation Bracket

DIRECT MOUNTING :

Shaft size - Round 10-20mm Square 10-16mm



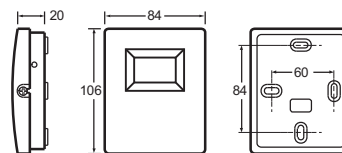
ACCESSORIES:



PAF Digital Positioner 0-100% Wall Mounting

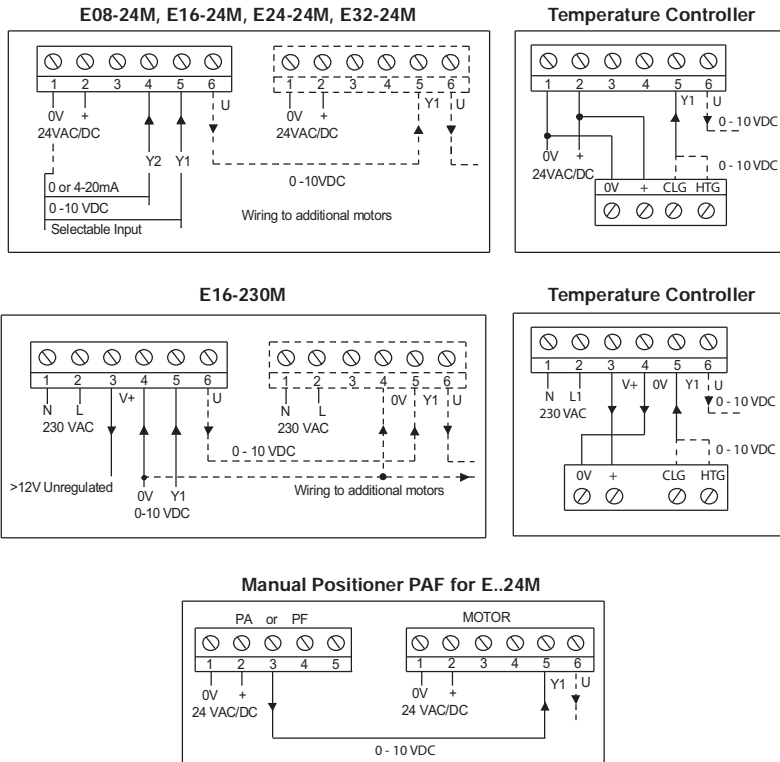


Dimensions (mm)

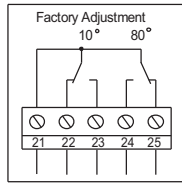


Output 0-10vdc or 2-10vdc selectable

WIRING:



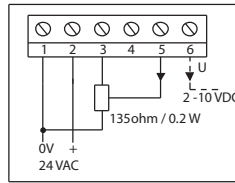
Aux Switches - all ..MS Models



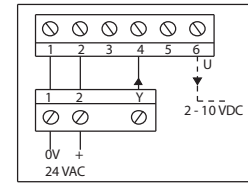
Example

Motor anti-clockwise 21-22 closed at 10° and below
Motor clockwise 21-24 closed at 80° and above

Honeywell 90 E16-20M

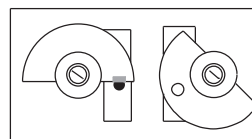
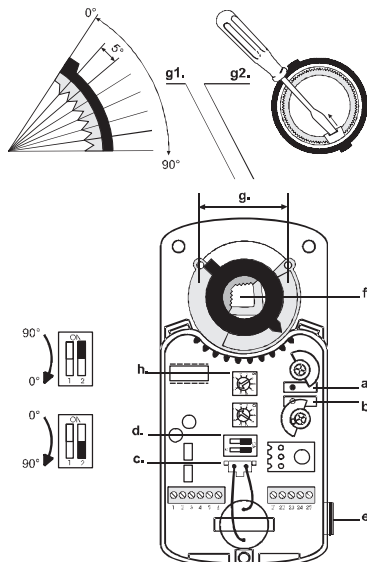


Staefa 0-20v Phase cut E16-20M



INPUT RESISTANCE Y1 > 100KΩ Y2 500Ω **LOAD RESISTANCE** U > 50KΩ
ON POWER CUT THE MOTOR STOPS. IF THE INPUT SIGNAL IS CUT, THE MOTOR RETURNS TO 0VDC POSITION.

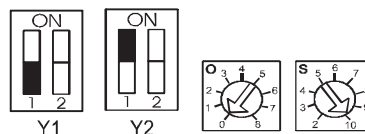
ADJUSTMENT:



2 x Aux switches Adjustable 0-90°
Manually set the motor to the required switching point & rotate the cam wheel to just over the microswitch button.
To set the second switching point repeat this using the second cam wheel.

- (1) **Signal** (2) **Potentiometer**
 Y1 = DC 0...10 V → O = 0 / S = 10
 Y1 = DC 2...10 V → O = 2 / S = 8
 Y2 = 0...20 mA → O = 0 / S = 10
 Y2 = 4...20 mA → O = 2 / S = 8

(3) Adapting



FOR FUNCTIONAL REASONS THE MOTOR PLUG ON MODULATING MOTORS MUST NOT BE REVERSED

INSTALLATION: Min cable size 7/0.2mm or
Screened cable is recommended.

Max length 100m.

The screen should be earthed at controller end only.
Keep away from power cables/units which may cause interference.