

# B.M.S INPUT-OUTPUT MODULES 0-10VDC TO 0-20V PHASE CUT

## E..PCM

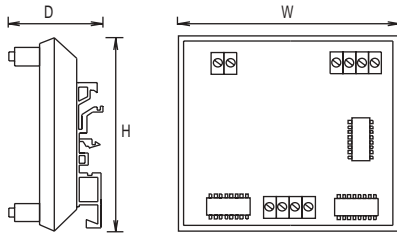
These units convert one or two 0-10vdc inputs to one or two 0-20V phase-cut outputs to control Staefa 2 wire valves and Belimo actuators.



Input current > 1mA  
**Use the correct size transformer for the VA rating of the actuator / valve.**  
 The output signal varies at the same rate as the input signal.  
 Humidity 0-90%RH non condensing  
 Ambient -10 /+50°C  
 Consumption 51mA      Flammability = UL94-V0

Type	Input Supply ±15%	Input Signal	Output Supply ±15%	Output Signal	Max Actuator Rating	Mounting	Enclosure
<b>EDPCM</b>	24VAC/DC	2 x 0-10VDC	24VAC	2 x 20V Phase cut	<b>30VA/channel</b>	Din Rail	IP00
<b>ESPCM</b>	24VAC/DC	1 x 0-10VDC	24VAC	1 x 20V Phase cut	<b>60VA</b>	Din Rail	IP00
<b>EHPCM</b>	24VAC	1 x 0-10VDC	24VAC	1 x 20V Phase cut	<b>120VA</b>	Din Rail	IP00

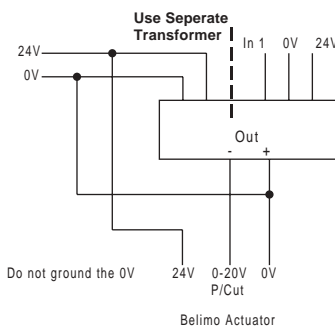
### DIMENSIONS:



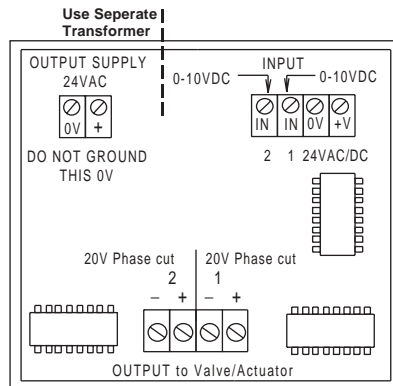
	H	W	D
<b>EDPCM</b>	82	90	45
<b>ESPCM</b>	82	90	45
<b>EHPCM</b>	82	137	70

### WIRING:

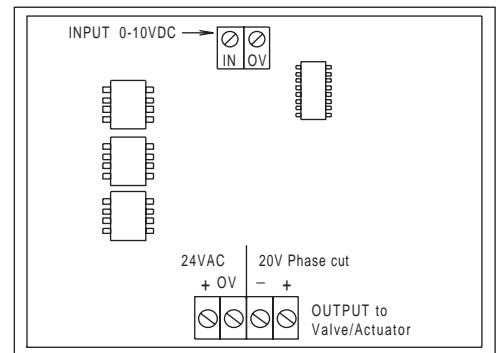
#### Example for wiring to Belimo Actuator



#### EDPCM / ESPCM



#### EHPCM



For the OUTPUT SUPPLY select the transformer VA rating according to the actuator rating.

**NOTE:** If the 0V of the 0-10vdc signal is grounded ( top right hand terminals ), then do not use the same 24V transformer to feed the OUTPUT SUPPLY ( top left hand terminals ). Use a separate transformer on the OUTPUT SUPPLY ( top left hand terminals ) and DO NOT ground the 0V.

The ESPCM can only be used for 1 x 0-10VDC input & 1 x 0-20V phase cut output using channel 1.  
 The EDPCM can be used for 2 x 0-10VDC input & 2 x 0-20V phase cut output using channels 1 & 2.

If the VAC/DC input supply is removed, both outputs will be ON. If the 0-10VDC input signal is removed, that channel will be cut off.  
 THE OUTPUTS MUST NOT BE CONNECTED OR DISCONNECTED WHEN THE UNIT IS POWERED AS THIS WILL DAMAGE THE UNIT.

### INSTALLATION:

Terminals 0.5-2.5mm<sup>2</sup> rising clamps. Min sensor / control signal cable size 7/0.2mm. Max length 100m  
 Screened cable is recommended, the screen should be earthed at controller end only  
 Keep sensor/control signal wires away from power cables/units which may cause interference.

### CAUTION:

These devices are suitable for low voltage supply only.  
 Isolate device from electrical supply before servicing  
 Observe design limits of temperatures/electrical ratings.

Device should be checked by a qualified technician before applying any voltage.  
 Observe all relevant safety precautions, wiring/earthing regulations and electrical ratings.  
 Observe safety precautions for handling electrostatic sensitive devices.

Always ensure the device operates correctly. If failure of the device can cause damage a safety backup control should be fitted.  
 All data is for guidance purposes only, subject to change without prior notice and not guaranteed to be absolutely correct unless confirmed by us in writing.