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COSTER

(THERMSHARE) SYSTEM REVERSIBLE ROTARY ACTUATOR FOR HGT - HGM - HMM - VDM VALVES

CDR 061 Eng.

Reversible with one-wire electric control

Power supply 24 V~ from ICS 6...

Protection: actuator IP 54, "Intelligent" unit IP 30

· Connection to ICS 6... control unit by means of a single fine wire

1. APPLICATION

Actuator CDR 061 is designed for use exclusively in the "Thermshare" system, to control HGT radiator valves, HGM-HMM ball valves or VDM ceramic disk valves.

2. OPERATION

CDR 061 actuator comprises two parts:

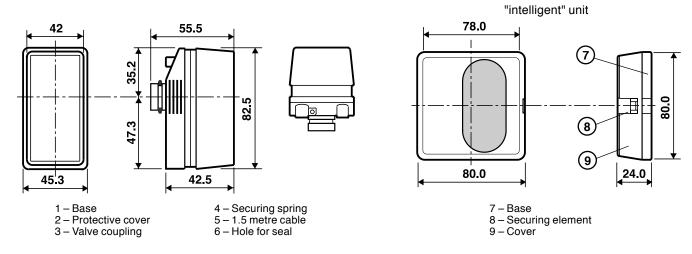
- the actuator itself, mounted on the valve,
- the so-called "Intelligent" unit which, connected to the ICS 6.. control unit by a single wire, interprets the open or close signals sent to it along the single wire and generates a three-wire 24 V~ electric signal (common, opens, closes) with which it controls the actuator.
- A pre-wired cable connects the two parts.

The 90° run is limeted by two microswitches operated by an end-of-run cam.

3. TECHNICAL DATA

Power supply from ICS 6	max 24 V~	Valve fluid temperature	5…95 °C
Frequency	5060 Hz	Ambient temperature:	
Maximum consumption	35 mA	- operating	0…45 °C
Rotation angle	fixed at 90°	- storage	– 20…60 °C
Run time	60 s	Protection:	
Nominal torque	30 kg/cm (3.0 Nm)	 actuator 	IP 54
Starting torque	15 kg/cm (1.5 Nm)	– "Intelligent" unit	IP 30
Materials:	- · · ·	Weight	0.280 kg
– base	NYLON + glass fibre	C C	C C
- cover	ABS		

4. OVERALL DIMENSIONS



5. CONSTRUCTION

The actuator itself has IP 54 electrical protection whilst that of the "Intelligent" unit is IP 30.

A pre-wired 30 cm cable connects the actuator with the "Intelligent" unit.

The coupling element at the rear of the base (4.3) permits rapid mounting on the valve whereas the "Intelligent" unit must be fixed to a wall.

The terminal block and the microswitches for addressing are contained in the "Intelligent" unit.



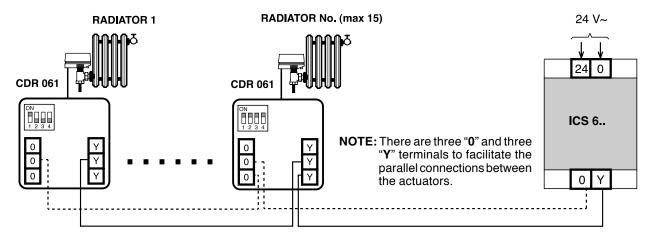


6. MOUNTING THE ACTUATOR

Installing on the valve **HGT**: by hand, set the valve in the "open" position. Pull out the hand grip and then insert and push down the actuator (factory setting: "Open").

Installing on the valves **HGM - HMM - VDM**: by hand, set the valve in the "closed" position. Pull out the hand grip and then, using a suitable tool, set the valve in the "open" position. Then insert and push down the actuator (factory setting: "Open").

7. WIRING DIAGRAM



8. ELECTRICAL CONNECTIONS

- The actuator is pre-wired to the "Intelligent" unit. No further connections are required between the two parts. • Mount the base of the "Intelligent" unit to the wall (4.7).
- Carry out the wiring according to the diagram and in compliance with the regulations in force and using:
 - No. 1 wire of 0.1 mm² minimum cross-section for the connection to the ICS 6.. control unit,
 - No. 2 wires of the same cross-section in the event that continuity to earth of all the radiators in the flat is not guaranteed (e.g. when the radiator pipes are in plastic). In this case, must be made the short dashes line connections, as in the wiring diagram of section 7.

9. SINGLE RADIATOR ADDRESS ON INTELLIGENT UNIT OF CDR 061

Set the code for each radiator in the "Intelligent" unit of CDR 061 as shown in the table "A - FLAT" (form consigned by Coster to installer) using the table of the dipswitches shown here on the right. The code is the number at the side of each combination of the four dipswitches.

WARNING: The correct assignment of the code to each radiator (as shown in table "E" - form consigned by Coster to installer) is essential for the correct functioning of the system and the subsequent correct cost allocations.

The codes must start from "1" and progress without omissions and without double assignments up to the last radiator (the code of the last radiator will be the same as the number of radiators set on the ICS 6..). <u>A WRONG SETTING WILL CAUSE:</u>

- no control of the radiators which have a code number higher than the number of radiators set in the ICS 6...
- fault alarm signal if the codes are not in sequence or the same code has been assigned twice.

COMPARISON TABLE DIPSWITCHES RADIATOR CODE										
	1	2	3	4	number	1	2	3	4	number
ON 🛉					Not to be used					8
					1					9
					2					10
	٦				3					11
					4					12
					5					13
					6					14
	٦				7					15