# resideo

# Centra Rotary Actuators VMM/VMK

Rotary Actuators, 3-point control

# **APPLICATION**

The Resideo Centra VMM/VMK actuators are designed to provide floating control in heating and air conditioning systems. High control performance and a robust design are standard for this actuator.

In combination with Resideo Centra rotary valves (DR, DRU, DRG, ZR, ZRK), it is possible to control very exact heating and cooling water temperatures.

The mechanical interface between actuator and valve is designed for reliable operation.

Actuators with torques from 10 Nm up to 40 Nm are available for a wide range of rotary mixing valves (DN 15 up to DN 200).

# **APPROVALS**

- CE
- UKCA

# **SPECIAL FEATURES**

- Maintenance-free electrical actuator for rotary valves
- Direct mounting on Centra rotary valves
- High torque for reliable operation
- Protected against overload and blocking which results in long lifetime
- Clear position indicator
- Large wiring cabinet for easy electrical installation
- Manual operation possible



# **TECHNICAL DATA**

Specifications					
Angle of rotation:	90°				
Protection standard:	IP54 per EN 60529				
Insulation class:	I per EN 60730				
Control signal:	3-point				
Weight:	1.5 kg				
Ambient operating	0 to 60 °C				
temperature:					
Relative humidity:	non-condensing				

# **METHOD OF OPERATION**

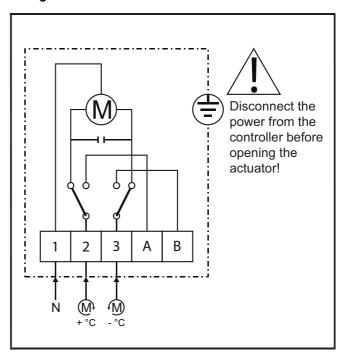
The actuator is powered by a synchronous motor. The spindle of the actuator rotates 90  $^{\circ}$ . In the end positions, the motor is switched off by end switches. Manual operation declutches the gear from the valve. As soon as the actuator is powered, the valve is driven by the actuator again. No adjustment necessary. The actuator is maintenance–free.

# **INSTALLATION GUIDELINES**

#### Mounting

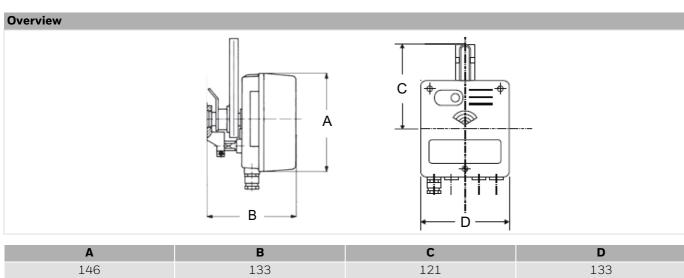
Before mounting the actuator, position the rotary valve according to its installation instruction. In the case of boiler applications, it is recommended that the actuator be mounted in a vertical position. If mounted in the horizontal position, one should position an isolation shield between the top of the valve and the actuator; this is to protect it against radiant heat and to ensure ambient temperatures of below  $60\ ^{\circ}\text{C}.$ 

#### Wiring



# **DIMENSIONS**

# VMM/VMK



Note: All dimensions in mm unless stated otherwise.

Actuator shown in vertical position.

# **ORDERING INFORMATION**

# Options

Nominal torque (Nm)	Power supply	Power consumption	Runtime (min/90°)	Ordering Number
8	230 V AC	3.5 VA	0.6	VMK8-4*
8	24 V AC	5.0 VA	0.6	VMK8-4-24*
10	230 V AC	3.5 VA	1.5	VMK10-4*
10	24 V AC	5.0 VA	1.5	VMK10-4-24*
10	230 V AC	3.5 VA	1.6	VMM10
10	24 V AC	5.0 VA	1.6	VMM10-24
20	230 V AC	3.5 VA	1.6	VMM20
20	24 V AC	5.0 VA	1.6	VMM20-24
30	230 V AC	3.5 VA	2.3	VMM30
30	24 V AC	5.0 VA	2.3	VMM30-24
40	230 V AC	3.5 VA	3.5	VMM40
40	24 V AC	6.0 VA	3.5	VMM40-24
40	230 V AC	3.5 VA	1.2	VMM40F
40	24 V AC	6.0 VA	1.2	VMM40-24F

 $<sup>^{\</sup>star}\, \text{The VMK...}$  are designed for ZRK rotary valves only

# **Accessories**

	Description	Dimension	Part No.			
	Feedback potentiometer 10 kOhm					
	Suitable for all VMM/VMK variants		VMP10-90			
	Auxiliary switch package					
	Ready-to-mount assembly consisting of two switches (3A / 250 V AC) and two switching cams; max. one VMS2 per actuator.		VMS2			
	Universal attachment kit for almost all third-party makes					
	In some cases rework at the construction site must be accepted, only for actuators VMM and VRM		ATU2040A			

# **Spare Parts**

Rotary Actuator VMM/VMK, from 1986 onwards

Overview		Description	Voltage	Part No.
		Synchronous motor for		
9		VMK8-4	230 V AC	030000345
		VMM10-4		
		VMK10		
		VMM20		
3		VMM30		
		VMK8-4-24	24 V AC	030000432
		VMK10-4-24		
		VMM10-24		
		VMM20-24		
		VMM30-24		
		VMM40-24	24 V AC	030000531
	2	PCB for		
2		VMK8-4	230 V AC	030000346
		VMK10-4		
		VMM10		
		VMM20		
		VMM30		
		VMM40		
		VMM40F		
		VMK8-4-24	24 V AC	030000433
0: 1		VMK10-4-24		
20		VMM10-24		
		VMM20-24		
		VMM30-24		
		VMM40-24	24 V AC	030000498
	3			
Ħ				030000212
		Gear set I-III (no fig.) for		
(1)		VMM20	230 V AC, 24 V AC	030000482
		VMM40-24		

