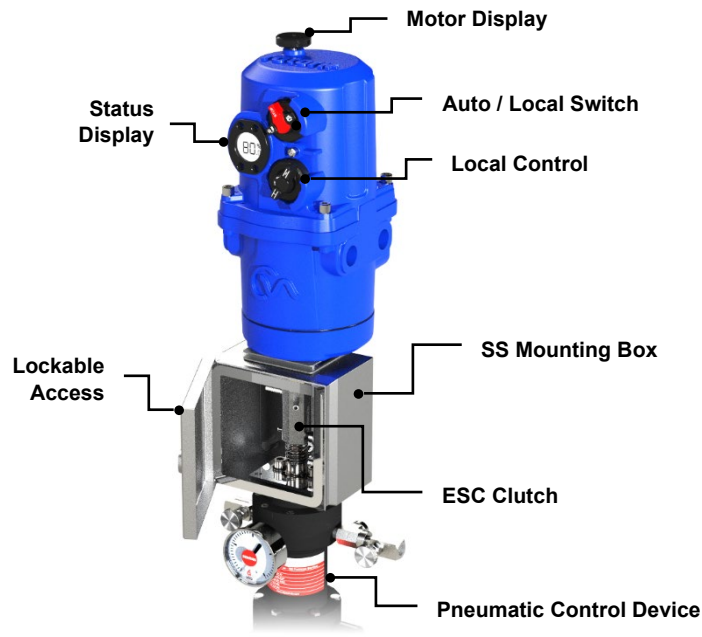




**PCB & Terminal Board
(Inside CMR Enclosure)**

Figure 1.0 – ESC-CMR Assembly & Terminal Board

Table 1.0 – ESC-CMR Electronic Setpoint Control Specifications

Description	The VRG Controls ESC-CMR Electronic Setpoint Controller provides precise remote setpoint adjustment for VRG Controls VPC Valve Pilot Controllers, RP Regulator Pilots, and control instrumentation used in natural gas applications. Built on the Rotork CMA electric actuator platform, the ESC-CMR converts electronic control commands into accurate mechanical adjustment of the pilot setpoint and interfaces with SCADA, PLC, and DCS systems. To ensure uninterrupted operation, the ESC-CMR locks the last commanded setpoint in the event of a loss of power, communications, or electronic controller failure, allowing the pneumatic controller or regulator pilot to continue regulating at the last established pressure. High positioning accuracy, continuous modulating duty, and hazardous-area approved configurations make the ESC-CMR ideal for reliable remote pressure control.
Installation	May be provided in tandem with new control device or retrofit to compatible existing devices
Model / Part No.	See Table 2.0
Compatible Devices	VPC Controllers, RP Pilots, RPID Controllers, Mooney Series 20, 20S, 20L Pilots – See Table 3.0
Voltage	24 VDC (Standard) / 120 VAC (Option)
Motor Position Feedback	4-20 mA
Motor Speed	2.5 to 5.0 RPM w Interrupt Timer (Adjustable)
Rotation / Torque	90° To 20 Turns (Adjustable) / 80-200 in-lbs (Adjustable, Typ. Limited to 120 in-lbs Max)
Design Life Rating	20 million 1.0% Movements 75% Load / 5.0 million 10% Movements 100% Load
Display	LCD Display, Local Controls - Menu Driven Pushbutton
Mounting	Includes Mounting Hardware, Drive Interface / Enclosure
Temperature	-40° F to +140° F (-40° C to +60° C)
Body Materials	Aluminum Enclosure, RAL5010 (blue) Polyester Power Coat
Electrical Rating	Ex Proof, CI 1, Div 1, Groups C, D, E, F, G, CSA Approved (Standard) CE ATEX0011X FM ATEX0012X (EU Specification Option)
Manual Override	External Manual Knob, Menu Driven Pushbutton, Declutchable Interface Manual Override
Limit Switches	Menu Configurable Position Limit Switches
Weight	18.7 lbs (8.5 kg) - Motor / 23.7 Lbs (10.8 kg) - Motor + BOX
Approx OAD	13.33 in X 7 in X 6 in Motor / 20 in X 7.25 in X 6 in Motor + BOX
Ports	0.750 FNPT Electric Conduit Entries – Qty 4 Total
Available Accessories	Requires CMR Mounting Kit for Installation on Control Devices PRM Process Readout Module Dual Display. 4-20 mA Input Loop-Powered

Table 2.0 – ESC Electronic Setpoint Control – Available Motor Assemblies

VRG Sales Code	VRG Part	Rotork Model Number	Power	Command	Hazardous Area Class
ESCCMR24VDCMTR	BA-0336	CMR-200-FM-24VDC M00-D0	24 VDC 1.5 A Max	4–20 mA or 24 VDC Pulse	Class I, Div. 1 (FM)
ESCCMR24VDCATEXMTR	BA-0336-1	CMR-200-ATEX-24VDC M12-D0	24 VDC 1.5 A Max	4–20 mA or 24 VDC Pulse	ATEX
ESCCMR120VACMTR	BA-0338	CMR-200-FM-120VAC M00-D0	120 VAC 0.42 A Max	4–20 mA or 120 VAC Pulse	Class I, Div. 1 (FM)

Notes:

- See individual ESC nameplate and tech data sheet for full details.
- ESC Electronic Setpoint Control Motor Assembly requires ESC Mounting Kit (Ref Table X.0) for full implementation.
- Additional ESC Motor Assembly configurations available. Contact VRG Controls for assistance.

Table 3.0 – ESC Electronic Setpoint Control – Available Mounting Assemblies

VRG Sales Code	VRG Part	Applicable Control Device
ESCCMRVRGMNT	PA-0508-1	VRG Controls VPC Valve Pilot Controllers VRG Controls RP Regulator Pilots VRG Controls RPID Regulator Controllers
ESCCMRM20MNT	PA-0558-1	Mooney Series 20 Regulator Pilots Mooney Series 20S Regulator Pilots
ESCCMRM20LMNT	BR-0552-1	Mooney Series 20L Regulator Pilots

Notes:

- Additional ESC Mounting Assembly configurations available. Contact VRG Controls for assistance.

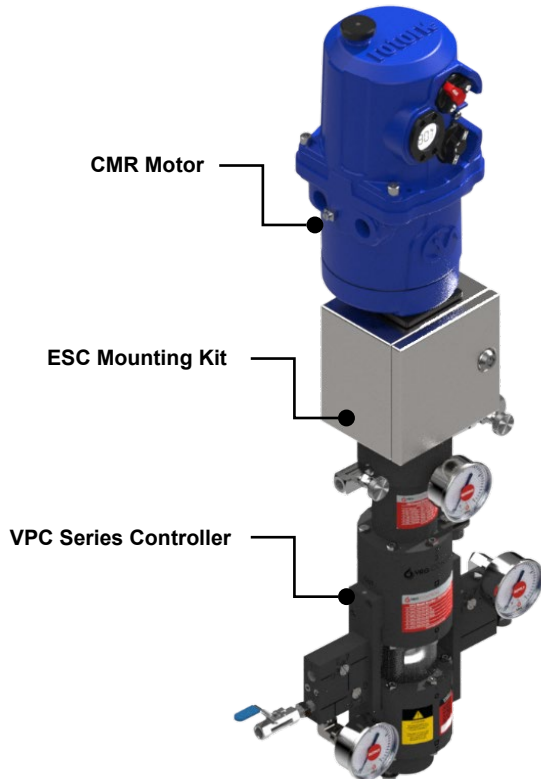

Figure 2.0 – ESC-CMR on VPC Series Controller

Figure 3.0 – ESC-CMR on RP Series Pilot