

Available with actuator function: **POWER OPEN - POWER CLOSE, FAILSAFE, MODULATING, FAILSAFE MODULATING**

## VB190



### Overview

The VB190 multi-voltage electric valve actuator from the European electric actuator manufacturer Valbia offers an impressive list of standard features that include multi-voltage capability, protection against damage from over-torque or condensation, and emergency hand operation facility.

Available modulating on request with either 4-20mA or 0-10V input and output, with factory fitted internal positioning system.

Available failsafe on request (except 12V version) with factory fitted internally installed battery back-up system.

### VB190 VALBIA Electric Actuator Specifications

Voltage range / Duty rating	Low voltage version	12V AC (1ph) or DC / 50% 24V AC (1ph) or DC / 75%
	High voltage version	100-240V AC (1ph) / 75%
Operating time (0-90° no load)	27 seconds	
Maximum break torque	190 Nm (1682 lb.ins)	
IP Rating (IEC 60529)	IP67	
Working angle Standard (on request)	90° (180° & 270° option)	
Mounting ISO:5211 x DIN 3337	F07 & F010 x 17 (std)	
Motor switches	2 x SPDT micro switches	
End of travel confirmation (volt free)	2 x SPDT micro switches	
Heater	Yes	
Ambient temperature range	-20° to +55°C (-4 to +131°F)	
Electrical connections	PG11 x 2	
Weight	4.9 kg	

### VB190 Consumption

High Voltage Version	Nominal Voltage	100-240V AC (1 ph 50/60Hz)
	Current	0.3 - 0.6A
	Power	60-72 VA
High Voltage Version	Nominal Voltage	12V AC/DC / 24V AC/DC
	Current 12V / 24V	2.85 - 3.8A / 1.2 - 1.8A
	Power	34 - 46A / 29 - 43VA
Frequency	50/60Hz	

### How this VB190 electric 1/4 turn valve actuator works (on-off)

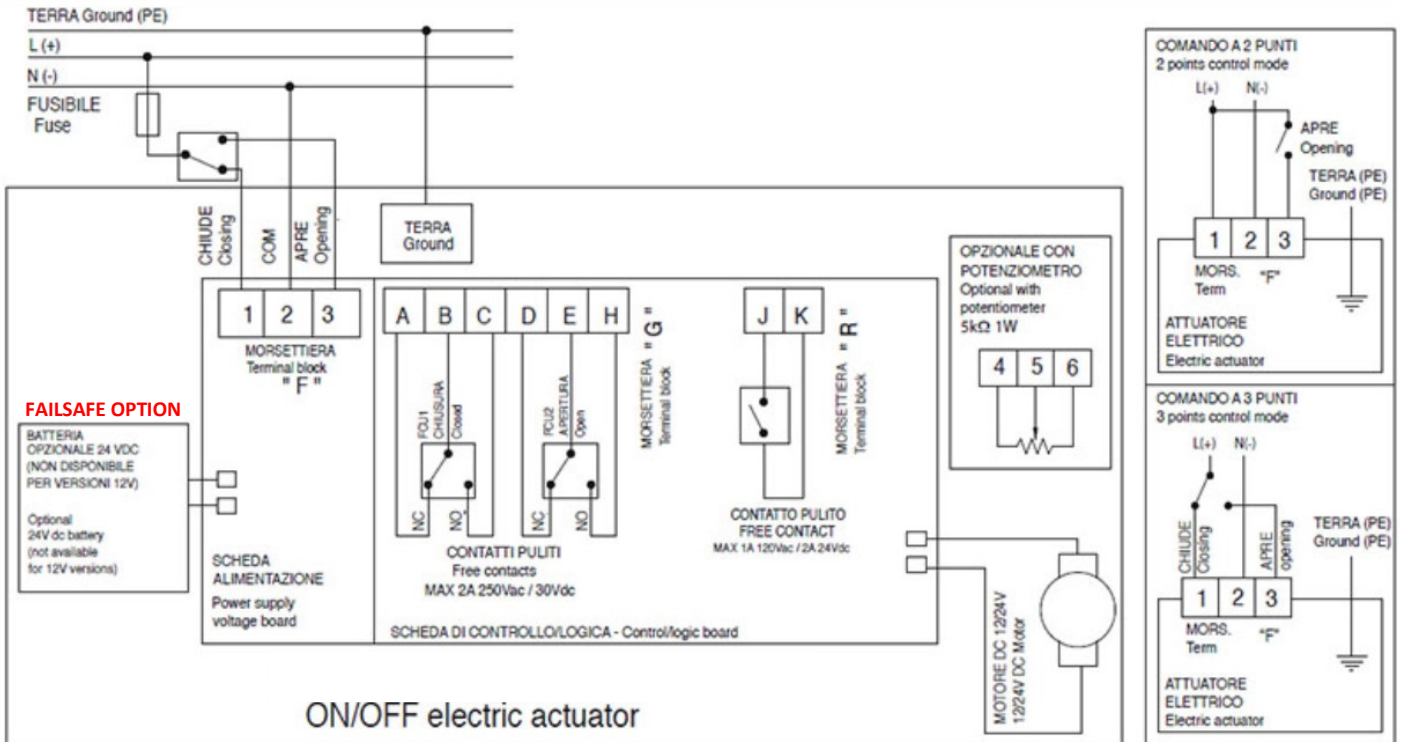
Electrically operated valves are driven by an electric actuator containing a motor and gearbox. On receipt of a continuous voltage signal (not pulse) the motor runs and, via a gearbox in the electric actuator, rotates the valve stem. The motor stops at the desired position (usually 0° or 90°) by an internal cam striking a micro-switch. The valve actuator remains in this position, with the voltage still applied continuously, until switched and a continuous voltage reversing signal (not pulse) is applied, which runs the motor in the opposite direction, reversing the rotation until a separate internal cam strikes a separate micro-switch and stop the motor. The VB190 actuator is designed to have the external power continuously applied, and power must not be switched off when end of travel is achieved.

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### Electrical Connections

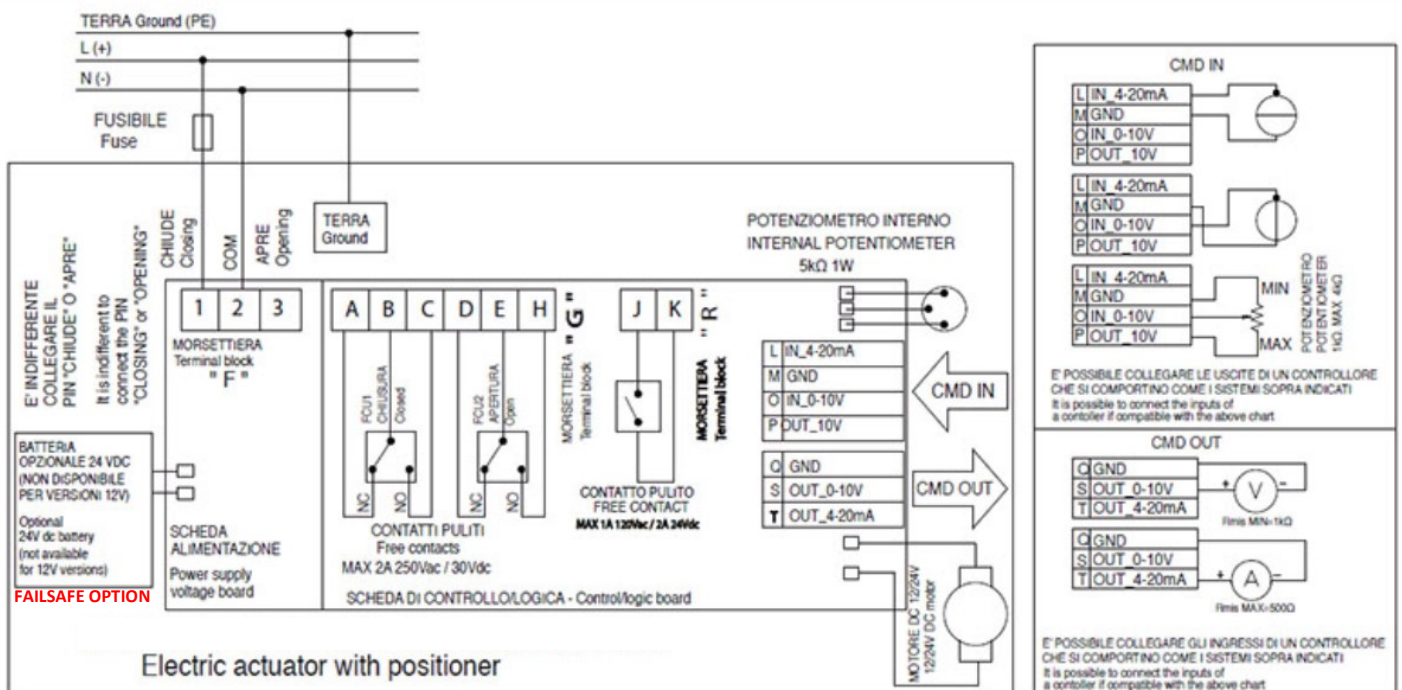
#### VB-190 ON - OFF ELECTRIC ACTUATOR

Power open, power close, stays put on loss of external power.



#### VB-190 MODULATING ELECTRIC ACTUATOR

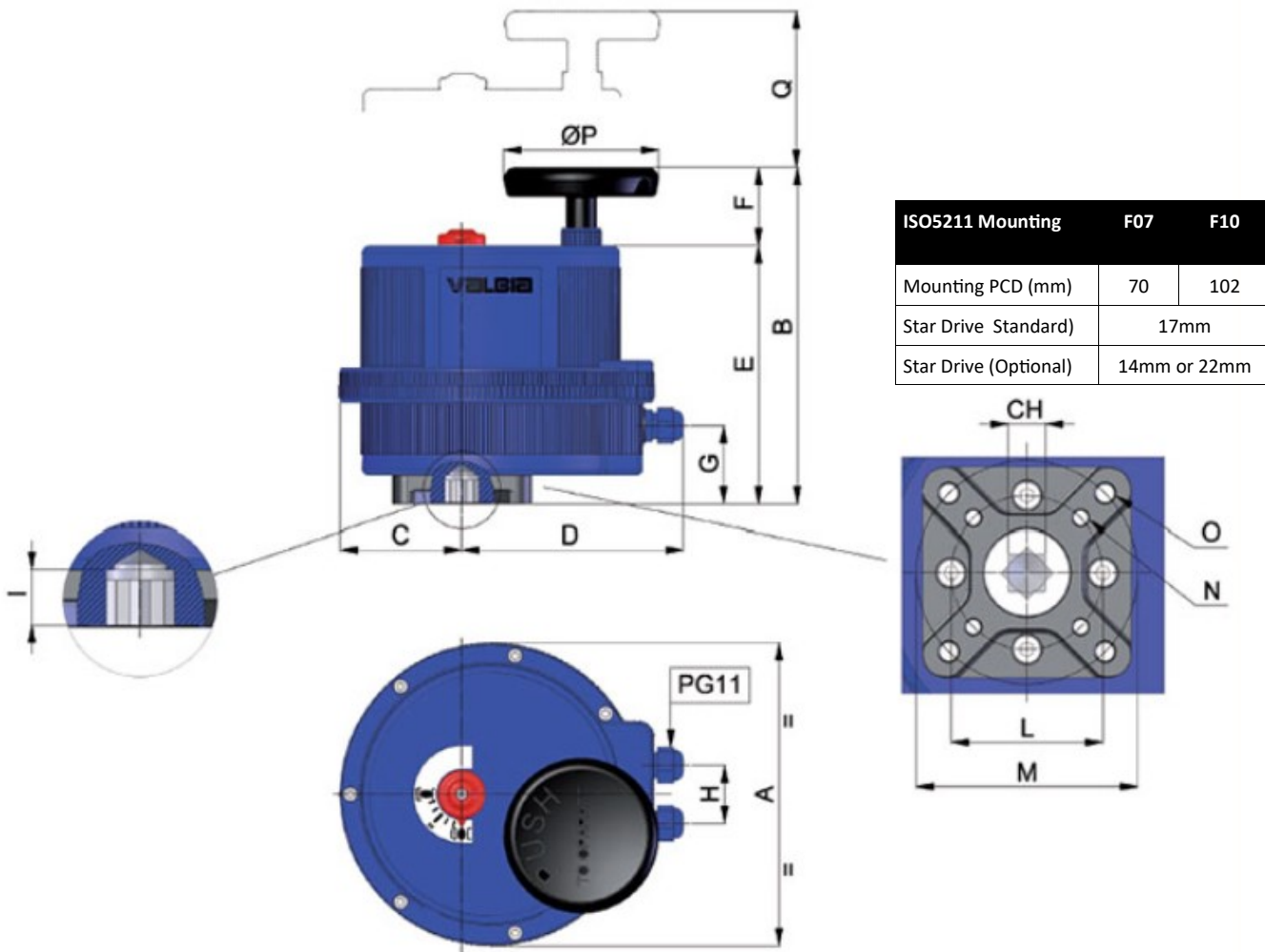
Proportional control, stays put on loss of external power.



Evitare che il segnale di massa/neutro dell'alimentazione COM collegato al morsetto "2" della morsetteria "F", non sia allo stesso potenziale elettrico della massa del segnale di comando "GND" della morsetteria "CDM IN" o della massa dell'uscita di segnalazione "GND" della morsetteria "CDM OUT".  
 The power supply COM signal ( pin "2" terminal block "F" ) must not share the same electrical command ground signal ( pin "GND" terminal block "CDM IN" ) or feedback ground signal ( pin "GND" terminal block "CDM OUT" ).

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**VB190 Dimensions**



**Dimensions (mm):**

CH	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q
17	211	232.1	84	153	178	54.1	52	40	19	70	102	M*x20	M10x20	110	105