

## ELECTRIC ACTUATOR – ER, VR, VRX, VS, VSX VERSION VT, VTX - STANDARD, FAILSAFE OR WITH POSITIONER



ER Version



VR Version



VRX (Atex) Version



VS Version



VSX (Atex) Version



VT Version

## MAIN FEATURES

- Compact design with IP66 protection and UL94V0 flammability class housing
- Torque from 10 to 2400Nm
- Operating time : 7s to 119s
- Duty rating : from 30 to 50% (IEC34 Standard)
- ISO 5211 Standard connection
- Modular position indicator (with handle for ER10-20)
- Declutching system for secured manual override
- Integrated anti-condensation self-regulated heater
- Torque limiter monitored by built-in software
- Failure feedback relay
- RS485 connection to enable remote control (on request)
- Guaranteed for 50 000 actuations or 3 years\*
- Up to 150 starts/hour\*\*
- Compliant with RoHs and REACH
- 3-point modulating or On-Off Control
- Available in Multi-Voltages:
  - 15V to 30V AC(50/60Hz) and 12V to 48V DC
  - 100V to 240V AC(50/60Hz) and 100V to 350V DC
  - 400V three phase (50/60Hz)
- Mechanical travel stops
- Various Possible rotation Angles
- ATEX version available for certain models

\* Tested on testing bench in the worst conditions (maximal torque and duty rating).

\*\* Recommended use, see instructions notice

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### SAFI

Av. Jacques Moison – BP 1  
26770 TAULIGNAN  
FRANCE  
Tél.: (+33) 4 75 53 56 29  
Fax : (+33) 4 75 53 62 78  
info@safi-valves.com

### SAFI Limited

35 Holton Road  
Holton Heath Trading Park  
POOLE Dorset - BH16 6LT  
UNITED KINGDOM  
Tél.: (+44) 1202 624618  
Fax : (+44) 1202 628500  
sales@safi-valves.com

### SAFI Deutschland

Kunststoffarmaturen  
Vertriebs GmbH  
Jahnstrasse 29  
64319 PFUNGSTADT  
DEUTSCHLAND  
Tél. : (+49) 61 57 81 919  
Fax : (+49) 61 57 82 025  
info-deutschland@safi-valves.com

### SAFI Fabrica de Valvulas

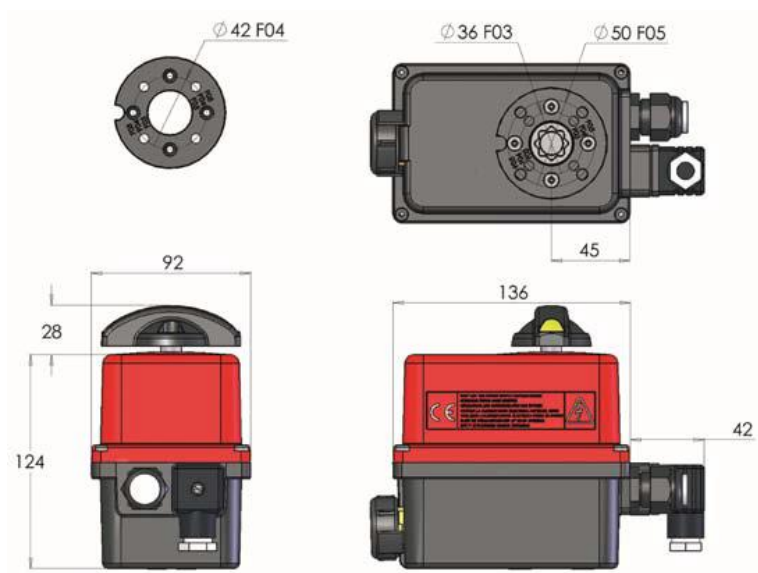
C/ Carboners, 35  
Pol. Ind. La Cometa  
43700 EL VENDRELL  
TARRAGONA-ESPAÑA  
Tel.: (+34) 977 665 147  
Fax : (+34) 977 664 989  
info@safi-valvulas.com

### SAFI America

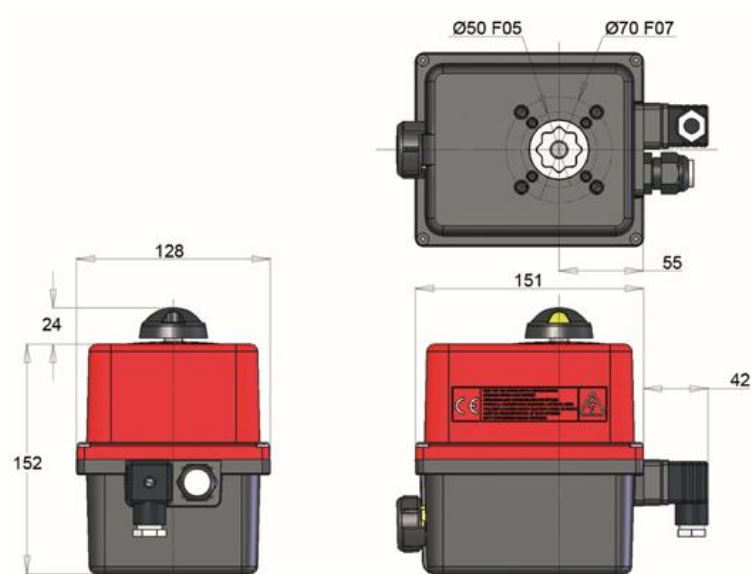
Las Garzas Trade Center  
Las Garzas #950, B  
Quilicura  
SANTIAGO – CHILE  
Tél.: (+56 2) 2 510 3500  
Fax : (+56 2) 2 510 3507  
info@safi-america.com

## DIMENSIONS

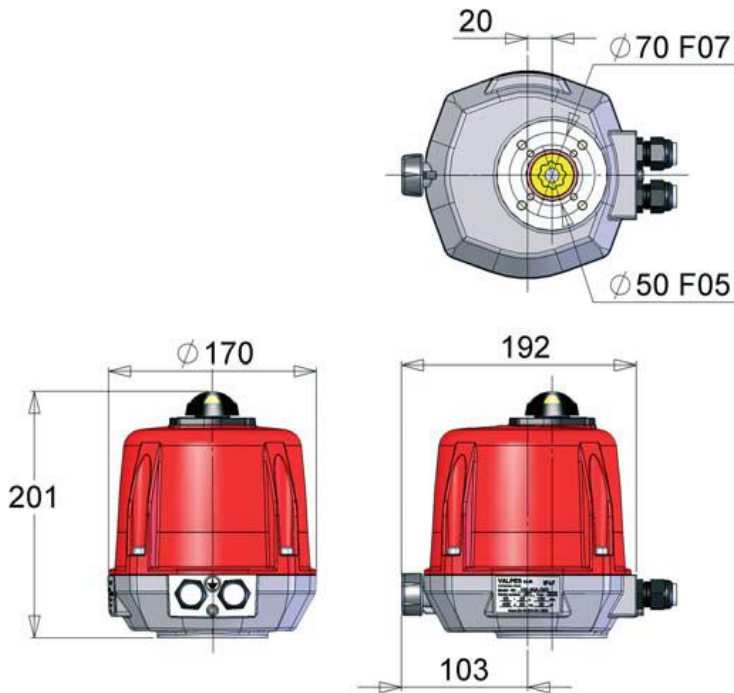
### ER 10-20 VERSION



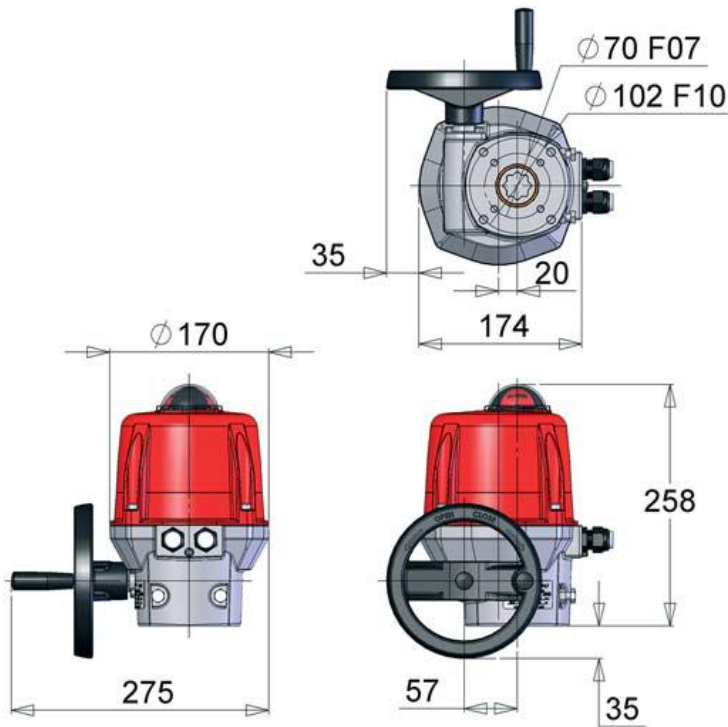
### ER 35-60-100 VERSION



VR/VRX VERSION



VS/VSX VERSION



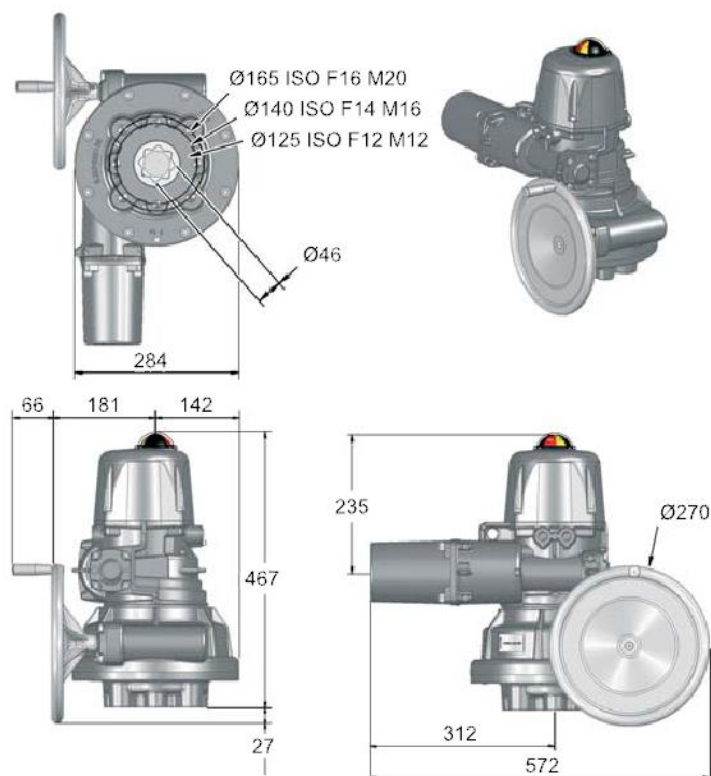
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**VT/VTX 600 – 1000 VERSION**



**VT/VTX 1500 – 2400 VERSION**



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## CHARACTERISTICS

	ER	VR/VRX (ATEX)	VS/VSX (ATEX)	VT
<b>Voltages</b>	<ul style="list-style-type: none"> <li>15-30V AC 50/60 Hz (12V to 48V DC)</li> <li>100-240V AC 50/60 Hz (100V to 350V DC)</li> </ul>	<ul style="list-style-type: none"> <li>15-30V AC 50/60 Hz (12V to 48V DC)</li> <li>100-240V AC 50/60 Hz (100V to 350V DC)</li> <li>400V Three phase 50/60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>15-30V AC 50/60 Hz (12V to 48V DC)</li> <li>100-240V AC 50/60 Hz (100V to 350V DC)</li> <li>400V Tree phase 50/60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>230V AC 50/60 Hz</li> <li>400V Tree phase 50/60 Hz</li> </ul>
<b>Operating Time</b>	<ul style="list-style-type: none"> <li>ER10 = 11s</li> <li>ER20 = 12s</li> <li>ER35 = 7s</li> <li>ER60 = 12s</li> <li>ER100 = 23s</li> </ul>	<ul style="list-style-type: none"> <li>VR25/VRX25 = 7s</li> <li>VR45/VRX45 = 15s</li> <li>VR75/VRX75 = 20s</li> </ul>	<ul style="list-style-type: none"> <li>VS100/VSX100 = 15s</li> <li>VS150/VSX150 = 30s</li> <li>VS300/VSX300 = 60s</li> </ul>	<ul style="list-style-type: none"> <li>VT 600 = 38s</li> <li>VT 1000 = 38s</li> <li>VT 1500 = 113s</li> <li>VT 2400 = 113s</li> </ul>
<b>Duty Rating</b>	50%	50% (80% On Request)	50% (80% On Request)	50%
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>ER 10-20 : 15W</li> <li>ER 35-100 : 45W</li> </ul>	<ul style="list-style-type: none"> <li>45W</li> <li>52W to 135W on the Three phase models.</li> </ul>	<ul style="list-style-type: none"> <li>45W</li> <li>52W à 135W on the Three phase models.</li> </ul>	<ul style="list-style-type: none"> <li>250W</li> </ul>
<b>Enclosure</b>	IP66	IP68 Ex d IIB T6 Gb - Ex tb IIIC T80°C Db (T5 and T95°C for FAILSAFE et 400V)	IP68 Ex d IIB T6 Gb - Ex tb IIIC T80°C Db (T5 and T95°C for FAILSAFE and 400V)	IP68 II 2 G D - Ex d IIB T5 Gb Ex tb IIIC T90°C Db
<b>Limit Switch</b>	4	4	4	4
<b>Electric Connection</b>	1x 3P+T DIN43650 connector + 1x ISO M20	2x ISO M20	2x ISO M20	2x ISO M20
<b>Anti-condensation Heater</b>	Series	Series	Series	Series
<b>Rotation Angle</b>	0-90° (on request 0-180° or 0-270°)	0-90° (on request 0-180° or 0-270°)	0-90° (on request 0-180° or 0-270°)	0-90° (on request 0-180° or 0-270°)
<b>ISO 5211 Connection</b>	<ul style="list-style-type: none"> <li>ER 10-20 : F03-F04-F05 / EF14</li> <li>ER 35-100 : F05-F07 / EF22</li> </ul>	<ul style="list-style-type: none"> <li>VR/VRX : F05-F07 / EF17</li> </ul>	<ul style="list-style-type: none"> <li>VS/VSX : F07-F10 / EF22</li> </ul>	<ul style="list-style-type: none"> <li>VT600-1000 : F10-F12 / EF36</li> <li>VT1500-2400 : F12-F14-F16 / EF46</li> </ul>
<b>Maximum Torque</b>	<ul style="list-style-type: none"> <li>ER10 = 10 N.m</li> <li>ER20 = 20 N.m</li> <li>ER35 = 35 N.m</li> <li>ER60 = 60 N.m</li> <li>ER100 = 100 N.m</li> </ul>	<ul style="list-style-type: none"> <li>VR/VRX25 = 25 N.m</li> <li>VR/VRX45 = 45 N.m</li> <li>VR/VRX75 = 75 N.m</li> </ul>	<ul style="list-style-type: none"> <li>VS/VSX100 = 100 N.m</li> <li>VS/VSX150 = 150 N.m</li> <li>VS/VSX300 = 300 N.m</li> </ul>	<ul style="list-style-type: none"> <li>VT/VTX600 = 600 N.m</li> <li>VT/VTX1000 = 1000 N.m</li> <li>VT/VTX1500 = 1500 N.m</li> <li>VT/VTX2400 = 2400 N.m</li> </ul>
<b>Nominal Torque</b>	<ul style="list-style-type: none"> <li>ER10 = 10 N.m</li> <li>ER20 = 20 N.m</li> <li>ER35 = 35 N.m</li> <li>ER60 = 60 N.m</li> <li>ER100 = 100 N.m</li> </ul>	<ul style="list-style-type: none"> <li>VR/VRX25 = 20 N.m</li> <li>VR/VRX45 = 35 N.m</li> <li>VR/VRX75 = 60 N.m</li> </ul>	<ul style="list-style-type: none"> <li>VS/VSX100 = 75 N.m</li> <li>VS/VSX150 = 125 N.m</li> <li>VS/VSX300 = 250 N.m</li> </ul>	<ul style="list-style-type: none"> <li>VT/VTX600 = 450 N.m</li> <li>VT/VTX1000 = 750 N.m</li> <li>VT/VTX1500 = 1000 N.m</li> <li>VT/VTX2400 = 2000 N.m</li> </ul>
<b>Number of Starts/Hour</b>	150 Starts / Hours	150 Starts / Hours	150 Starts / Hours	150 Starts / Hours
<b>Working Temperature</b>	-10°C to +55°C (FAILSAFE : -10°C to +40°C)	-20°C to +70°C (FAILSAFE : -10°C to +40°C)	-20°C to +70°C (FAILSAFE : -10°C to +40°C)	-20°C to +70°C (FAILSAFE : -10°C to +40°C)
<b>Weight</b>	<ul style="list-style-type: none"> <li>ER 10-20 : 1Kg/1,2Kg</li> <li>ER35-100 : 2,1Kg/2,3Kg</li> </ul>	<ul style="list-style-type: none"> <li>VR/VRX : 3,1Kg/3,5Kg</li> </ul>	<ul style="list-style-type: none"> <li>VS/VSX : 5,1Kg/5,5Kg</li> </ul>	<ul style="list-style-type: none"> <li>VT600-1000 : 24Kg</li> <li>VT1500-2400 : 53Kg</li> </ul>

	ER	VR/VRX (ATEX)	VS/VSX (ATEX)	VT
<b>Available Version in Standard</b>	<ul style="list-style-type: none"> <li>▪ <b>FAILSAFE</b> : Security unit which ensures return to initial position in case of power failure</li> <li>▪ <b>POSI</b> : Advanced and easily positioning solution</li> <li>▪ <b>3 POSITIONS</b> : Version allowing an intermediate position</li> <li>▪ <b>Bluetooth®</b> : Communicating actuators</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>FAILSAFE</b> : Security unit which ensures return to initial position in case of power failure</li> <li>▪ <b>POSI</b> : Advanced and easily positioning solution</li> <li>▪ <b>3 POSITIONS</b> : Version allowing an intermediate position</li> <li>▪ <b>Bluetooth®</b> : Communicating actuators</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>FAILSAFE</b> : Security unit which ensures return to initial position in case of power failure</li> <li>▪ <b>POSI</b> : Advanced and easily positioning solution</li> <li>▪ <b>3 POSITIONS</b> : Version allowing an intermediate position</li> <li>▪ <b>Bluetooth®</b> : Communicating actuators</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>FAILSAFE</b> : Security unit which ensures return to initial position in case of power failure</li> <li>▪ <b>POSI</b> : Advanced and easily positioning solution</li> <li>▪ <b>3 POSITIONS</b> : Version allowing an intermediate position</li> </ul>
<b>Available Options</b>	<ul style="list-style-type: none"> <li>▪ Two extra limit switches card</li> <li>▪ Feedback potentiometer</li> <li>▪ 0-10V, 0-20mA or 4-20mA Transmitter</li> <li>▪ 1 or 2 M12 3P+T connectors</li> <li>▪ 2<sup>nd</sup> 3P+T DIN43650 Connector</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two extra limit switches card</li> <li>▪ Feedback potentiometer</li> <li>▪ 0-10V, 0-20mA or 4-20mA Transmitter</li> <li>▪ 1 or 2 M12 3P+T connectors</li> <li>▪ Aluminium Housing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two extra limit switches card</li> <li>▪ Feedback potentiometer</li> <li>▪ 0-10V, 0-20mA or 4-20mA Transmitter</li> <li>▪ 1 or 2 M12 3P+T connectors</li> <li>▪ Aluminium Housing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two extra limit switches card</li> <li>▪ Feedback potentiometer</li> <li>▪ 0-10V, 0-20mA or 4-20mA Transmitter</li> <li>▪ 2<sup>nd</sup> 3P+T DIN43650 Connector</li> </ul>

Multiple Options Available : Contact us for more information

## DETERMINING THE PRODUCT CODE OF AN ACTUATOR

STANDARD Electric Actuator			
CODE		TYPE	ISO 5211 CONNECTION (CONNECTION/DSQ*)
VOLTAGE			
100-240 V AC 100-350 V DC	15-30 V AC 12-48 V DC		
2907-39A	2907-39B	ER10	F03-F04-F05 / 14
2907-40C	2907-40A	ER20	F05 / 14
2907-41R	2907-41N	ER35	F05-F07 / 22
2907-43B	2907-43F	ER60	F05-F07 / 22
2907-49B	2907-49D	ER100	F05-F07 / 22
2907-50J	2907-50A	VR25	F05-F07 / 17
2907-42B	2907-42D	VR45	F05-F07 / 17
2907-44B	2907-44A	VR75	F05-F07 / 17
2907-45B	2907-45M	VS100	F07-F10 / 22
2907-46A	2907-46C	VS150	F07-F10 / 22
2907-47A	2907-47C	VS300	F07-F10 / 22
2907-48A	/	VT600	F10-F12 / 36
2907-51A	/	VT1000	F10-F12 / 36
2907-52A	/	VT1500	F12-F16 / 46
2907-53A	/	VT2400	F12-F16 / 46

\*DSQ=Double square drive

FAILSAFE Electric Actuator			
CODE		TYPE	ISO 5211 CONNECTION (CONNECTION/DSQ*)
VOLTAGE			
100-240 V AC 100-350 V DC	15-30 V AC 12-48 V DC		
2907-39E	2907-39F	ER10	F03-F04-F05 / 14
2907-40F	2907-40D	ER20	F05 / 14
2907-41M	2907-41P	ER35	F05-F07 / 22
2907-43N	2907-43M	ER60	F05-F07 / 22
2907-49G	2907-49H	ER100	F05-F07 / 22
2907-50N	2907-50L	VR25	F05-F07 / 17
2907-42E	2907-42F	VR45	F05-F07 / 17
2907-44L	2907-44M	VR75	F05-F07 / 17
2907-45K	2907-45L	VS100	F07-F10 / 22
2907-46B	2907-46E	VS150	F07-F10 / 22
2907-47F	2907-47D	VS300	F07-F10 / 22
Contact us	/	VT600	F10-F12 / 36
Contact us	/	VT1000	F10-F12 / 36
Contact us	/	VT1500	F12-F16 / 46
Contact us	/	VT2400	F12-F16 / 46

\*DSQ=Double square drive

Electric Actuator WITH POSITIONER 4-20mA			
CODE		TYPE	ISO 5211 CONNECTION (CONNECTION/DSQ*)
VOLTAGE			
100-240 VAC 100-350 VDC	15-30 VAC 12-48 VDC		
2907-39E	2907-39F	ER10	F03-F04-F05 / 14
2907-40E	2907-40P	ER20	F05 / 14
2907-41J	2907-41Q	ER35	F05-F07 / 22
2907-43D	2907-43J	ER60	F05-F07 / 22
2907-49I	2907-49E	ER100	F05-F07 / 22
2907-50Q	2907-50P	VR25	F05-F07 / 17
2907-42G	2907-42H	VR45	F05-F07 / 17
2907-44N	2907-44O	VR75	F05-F07 / 17
2907-45J	2907-45N	VS100	F07-F10 / 22
2907-46G	2907-46F	VS150	F07-F10 / 22
2907-47G	2907-47E	VS300	F07-F10 / 22
Contact us	Contact us	VT600	F10-F12 / 36
Contact us	Contact us	VT1000	F10-F12 / 36
Contact us	Contact us	VT1500	F12-F16 / 46
Contact us	Contact us	VT2400	F12-F16 / 46

\*DSQ=Double square drive

Contact us for the V three phase, or ATEX (VRX, VSX and VTX) Version