



		FFH	FCR
GENERAL CHARACTERISTICS			
STANDARDS		IEC / EN 60497/3	IEC / EN 60497/3
CASE		Self extinguishing housing V0 UL94	Self extinguishing housing V0 UL94
PROTECTION CLASS		IP67 - Double insulation	IP65 - Double insulation (IEC / EN 60529)
CABLE ENTRY		M16 / M20	Nr 1 Ø 22.5 mm
VERSIONS		Single or double speed motor configuration. 3, 4 or 4 with mechanical stop positions.	Single or double speed motor configuration. 3, 4 or 4 with mechanical stop positions.
NOTES		Fully adjustable aluminium rods □ 2x200 mm with "0" indicator. Reinforced mechanical stop.	Fully adjustable aluminium rods □ 6x300 mm with "0" indicator. Reinforced mechanical stop.
AMBIENTAL TEMPERATURE		Operating: -25°C ... +55°C Storage: -30°C ... +70°C	Operating: -25°C ... +55°C Storage: -30°C ... +70°C
ELECTRICAL CHARACTERISTICS			
PRODUCT ID		P016 Giovenzana Cam switch line	P016 Giovenzana Cam switch line
STANDARDS		IEC/EN 60947/3 – UL508	IEC/EN 60947/3 – UL508
MARKING		CE, IMQ, RINA, EAC, CCC, cULus, cCSAus	CE, IMQ, RINA, EAC, CCC, cULus, cCSAus
RATED OPERATING VOLTAGE - U _e		690V	690V
RATED INSULATION VOLTAGE - U _i		690V	690V
RATHED IMPULSE WITH-STAND VOLTAGE - U _{imp}		4kV	4kV
RATHED THERMAL CURRENT - I _{th}		16A	16A
ENCLOSED THERMAL CURRENT - I _{the}		16A	16A
RATHED OPERATING CURRENT	AC21A AC22A	16A - 690 V AC	16A - 690 V AC
	AC23A 3ph 230V	13A - 4 kW	13A - 4 kW
	AC23A 3ph 400V	13A - 7.5 kW	13A - 7.5 kW
FREQUENCY		50 / 60 Hz	50 / 60 Hz
CONTACTS		Double gap positive opening ➞	Double gap positive opening ➞
BLOCK CALIBER		A3 (EN 60947-1)	A3 (EN 60947-1)
TERMINAL SCREW		M3.5	M3.5
TIGHTENING TORQUE		0.8 Nm / 7.2 lbin (EN60947-1) 7.5 lbin / 0.85 Nm (UL508)	0.8 Nm / 7.2 lbin (EN60947-1) 7.5 lbin / 0.85 Nm (UL508)
CON-NECTABLE SECTION	Flexible conductors	1 x 0.75 / 4 ... 2 x 0.75 / 2.5 mm ² 10 ... 18 AWG	1 x 0.75 / 4 ... 2 x 0.75 / 2.5 mm ² 10 ... 18 AWG
	Solid conductors	1 x 0.75 / 4 ... 2 x 0.75 / 2.5 mm ² 10 ... 18 AWG	1 x 0.75 / 4 ... 2 x 0.75 / 2.5 mm ² 10 ... 18 AWG

Position limit switch

The **FCR position limit switch** is used to control several handling systems:

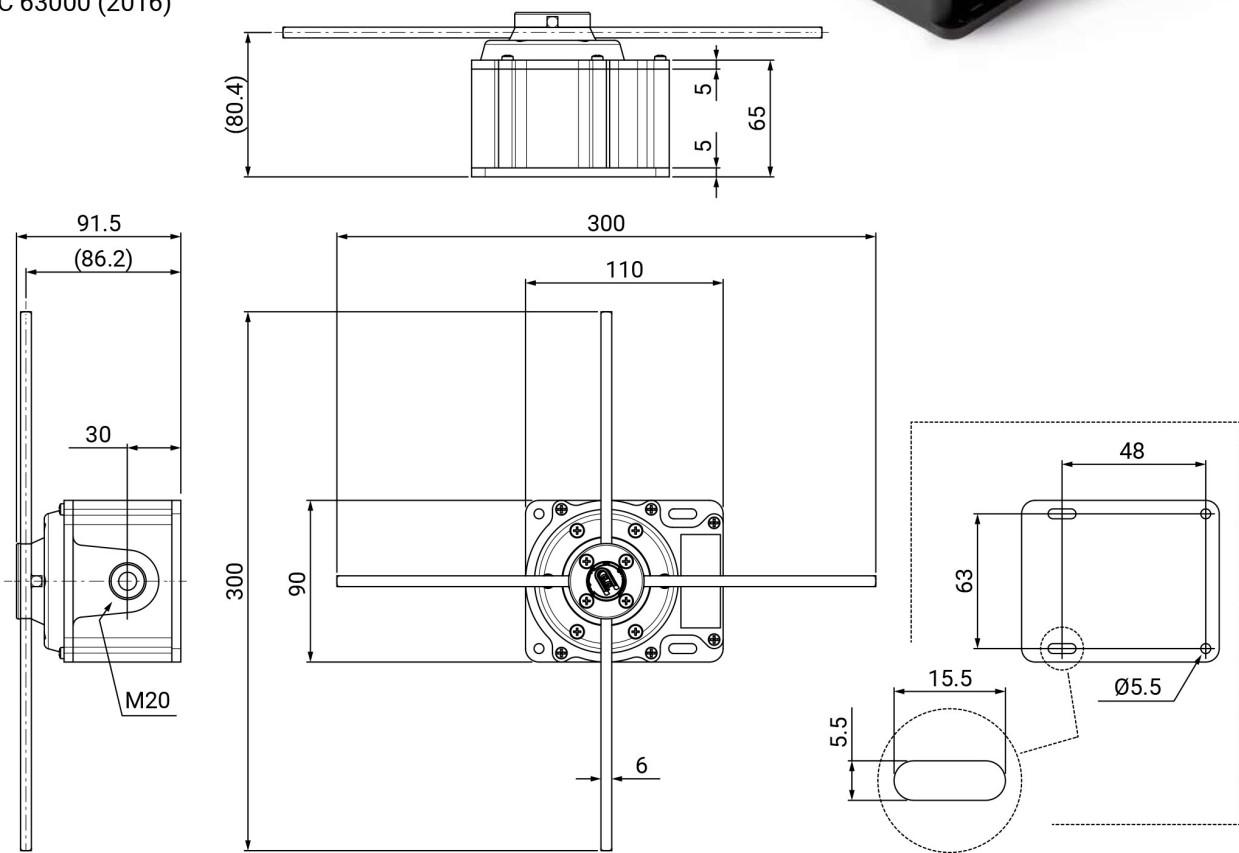
- **Bridge cranes:** the limit switch controls the operating system, for example a PLC, and allows the bridge crane to slow down or stop.
- **Hoists:** the limit switch is used to stop the hoist whenever it reaches a limit position.

Features

- Designed to guarantee excellent performance in the most challenging operating conditions.
- Arranged with 4 fixing holes.
- Positive opening NC contacts for safety functions.
- IP65 protection degree.
- Aluminium rods with 6x6 mm section and enclosure in thermoplastic material.
- Cross rods with 4 maintained positions every 90°.
- Arranged with 1 output for cable clamps to reduce installation time and make wiring easier.
- Available different versions, also customizable on request.

Compliance and certifications

- 2014/35/UE - 2011/65/UE - 2015/863/UE
- EN 60947-1 (2007/A1 : 2011/A2 : 2014)
- EN 60947-3 (2009/A1 : 2012/A2 : 2015)
- EN 60204-1 (2006/A1 : 2009)
- EN 60529 (1991/A1 : 2000/A2 : 2013)
- EN 50581 (2012)
- IEC 63000 (2016)



Available codes



FCR
Internal
cam switch
P016 line



 contact open  contact close

	FCR001	Single speed 3 positions With mechanical interlock ●	<table><tr><td>contacts</td><td>3 - 4</td><td></td><td></td><td></td></tr><tr><td></td><td>1 - 2</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>- 90°</td><td>0</td><td>+ 90°</td></tr></table> positions	contacts	3 - 4					1 - 2						- 90°	0	+ 90°																				
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	FCR002	Single speed 3 positions With mechanical interlock ●	<table><tr><td>contacts</td><td>7 - 8</td><td></td><td></td><td></td></tr><tr><td></td><td>5 - 6</td><td></td><td></td><td></td></tr><tr><td></td><td>3 - 4</td><td></td><td></td><td></td></tr><tr><td></td><td>1 - 2</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>- 90°</td><td>0</td><td>+ 90°</td></tr></table> positions	contacts	7 - 8					5 - 6					3 - 4					1 - 2						- 90°	0	+ 90°										
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	FCR003	Single speed 4 positions Without mechanical interlock	<table><tr><td>contacts</td><td>3 - 4</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>1 - 2</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>0</td><td>90°</td><td>180°</td><td>270°</td></tr></table> positions	contacts	3 - 4						1 - 2							0	90°	180°	270°																	
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