



PRODUCT-DETAILS

AF1350-30-22-70

AF1350-30-22-70 100-250V 50/60Hz / 100-250V DC Contactor



General Information	
Extended Product Type	AF1350-30-22-70
Product ID	1SFL657001R7022
EAN	7320500250150
Catalog Description	AF1350-30-22-70 100-250V 50/60Hz / 100-250V DC Contactor
Long Description	The AF1350-30-22-70 is a 3 pole - 1000 V IEC or 1000 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 475 kW / 400 V AC (AC-3) or 800 hp / 480 V UL and switching power circuits up to 1350 A (AC-1) or 1350 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

## Popular Downloads

EPLAN Data	9AAC200757_EPLAN
Data Sheet, Technical Information	1SBC100214C0202
Data Sheet, Technical Information (Part 2)	1SAC200017M0002
Instructions and Manuals	1SFC101002M5501
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	438 mm
Product Net Depth / Length	244 mm
Product Net Height	392 mm
Product Net Weight	32 kg
Dimension Diagram	53540930-7

## Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	2
Number of Auxiliary Contacts NC	2
Number of Poles	3P
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 1350 A
Rated Operational Current AC-1 ( $I_e$ )	(1000 V) 40 °C 1350 A (1000 V) 55 °C 1150 A (1000 V) 70 °C 1000 A (690 V) 40 °C 1350 A (690 V) 55 °C 1150 A (690 V) 70 °C 1000 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) 55 °C 860 A (440 V) 55 °C 860 A (500 V) 55 °C 800 A (690 V) 55 °C 800 A (1000 V) 55 °C 375 A (380 / 400 V) 55 °C 860 A (220 / 230 / 240 V) 55 °C 860 A
Rated Operational Current DC-1 ( $I_e$ )	(220 V) 3 Poles in Series, 40 °C 1350 A (600 V) 3 Poles in Series, 40 °C 1350 A (850 V) 3 Poles in Series, 40 °C 1350 A
Rated Operational Current DC-3 ( $I_e$ )	(220 V) 3 Poles in Series, 40 °C 1350 A (600 V) 3 Poles in Series, 40 °C 1350 A (850 V) 3 Poles in Series, 40 °C 1350 A
Rated Operational Current DC-5 ( $I_e$ )	(220 V) 3 Poles in Series, 40 °C 1350 A (600 V) 3 Poles in Series, 40 °C 1350 A (850 V) 3 Poles in Series, 40 °C 1350 A
Rated Operational Power	(415 V) 500 kW

AC-3 (P <sub>e</sub> )	(440 V) 560 kW (500 V) 560 kW (690 V) 800 kW (1000 V) 560 kW (380 / 400 V) 475 kW (220 / 230 / 240 V) 257 kW
Rated Breaking Capacity AC-3	8 x I <sub>e</sub> AC-3
Rated Making Capacity AC-3	10 x I <sub>e</sub> AC-3
Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 6000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 10000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 8000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 4500 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 10000 A
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 1000 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Maximum Electrical Switching Frequency	(AC-1) 60 cycles per hour (AC-2 / AC-4) 60 cycles per hour (AC-3) 60 cycles per hour
Mechanical Durability	0.5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x U <sub>c</sub> Min. ... 1.1 x U <sub>c</sub> Max. (at θ ≤ 70 °C)
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 100 ... 250 V 50 Hz / 60 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 48 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 48 V·A Holding at Max. Rated Control Circuit Voltage DC 20.5 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage DC 2290 V·A
Power Loss	at Rated Operating Conditions per Pole 80 W
Operate Time	Between Coil De-energization and NC Contact Closing 35 ... 55 ms Between Coil De-energization and NO Contact Opening 35 ... 55 ms Between Coil Energization and NC Contact Opening 50 ... 80 ms Between Coil Energization and NO Contact Closing 50 ... 80 ms
Connecting Capacity Main Circuit	Bar 100 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 1x0.75 ... 2.5 mm <sup>2</sup> Flexible 2x0.75 ... 2.5 mm <sup>2</sup> Solid 2 x 1 ... 4 mm <sup>2</sup> Stranded 1 x 1 .... 4 mm <sup>2</sup> Stranded 2 x 1 .... 4 mm <sup>2</sup>
Connecting Capacity	Bar 100 mm <sup>2</sup>
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
Connecting Terminals (delivered in open position) Main Poles	M 3.5 (+,-) pozidriv 2 screw with cable clamp
Recommended Screw Driver	Main Circuit M12 Control Circuit Pozidriv 2 Control Circuit M3.5
Tightening Torque	Cable Lug 45 N·m Main Circuit 45 N·m