



CONTROL FUSE GEAR

An ISO 9001:2008 Certified Company

Model: CFG1D-32

Contacteur - 3P (3NO) – AC - 3-<=440V

32 A – 230 V AC coil

Product Data Sheet - Characteristics



Main

Contactor Application	Motor control Resistive load
Utilization Category	AC-1 AC-3
Poles Description	3P
Power Pole Contact Composition	3NO
[Ue] rated operational voltage	<=690 V AC 25...400 Hz for power circuit <=690 V DC for power circuit
[Ie] rated operational current	32 A (<=60°C) at<=440VACAC-3for power circuit 50 A (<=60°C) at<=440VACAC-1for power circuit
Motor power kW	7.5 kW at220...230 V AC 50/60 Hz 15 kW at 380...400 V AC50/60 Hz 15 kW at 415...440 V AC50/60 Hz 18.5 kW at 500 V AC50/60 Hz 18.5 kW at 660...690 V AC 50/60 Hz
Motor power HP	5 hp at 230/240 V AC 50/60Hz for 1 phase motors 10 hp at 230/240 V AC 50/60Hz for 3phases motors 30 hp at 575/600 V AC 50/60Hz for 3 phases motors 2 hp at 115 V AC 50/60Hz for 1 phase motors 7.5 hp at 200/208 V AC 50/60Hz for 3 phases motors 20 hp at 460/480 V AC 50/60Hz for 3 phases motors
Control Circuit Type	AC 50/60 Hz
Control circuit voltage	230 V AC 50/60 Hz
Auxiliarycontact composition	1 NO + 1 NC
[Uimp] rated impulse with stand voltage	6 kV Self declare - conforming toIEC60947
Over Voltage Category	III
[Ith] conventional free air thermal current	10 A at <=60°C for signaling circuit 50 A at <=60°C for power circuit
Irms rated making capacity	140 A AC for signaling circuit self declare - conforming to IEC 60947-5-1 250 A DC for signaling circuit self declare - conforming to IEC 60947-5-1 550 A at 440 V for power circuit self declare - conforming to IEC60947
Rated breaking capacity	550 A at 440 V for power circuit self declare - conforming toIEC60947
[Icw] rated short-time with stand current	100 A 1 s signaling circuit 120 A 500 ms signaling circuit 140 A 100 ms signaling circuit 60 A <= 40°C 10 min power circuit 138 A <= 40°C 1min power circuit 260 A <= 40°C 10 s power circuit 430 A <= 40°C 1 s power circuit



Associated fuse rating	10A gG for signaling circuit self declare – conforming to IEC 60947-5-1 63A gG at <=690 V coordination type 1for power circuit 63A gG at <=690 V coordination type 2 for power circuit
Average impedance	2 mOhm at 50 Hz- Ith 50A for power circuit
[Ui] rated insulation voltage	690 V for power circuit self declare –conforming to IEC60947-4-1 690 V for signaling circuit self declare–conforming to IEC 60947-1
Power dissipation per pole	2 W AC - 3 5 W AC - 1
Safety cover	with
Mounting support	Plate Rail
Standards	Self declare – confirming to IEC60947-4-1 Self declare – confirming to IEC60947-5-1
Product certifications	CE
Connections - terminals	Control circuit: screw clamp terminals 1cable(s) 1...4mm ² - cable stiffness: flexible – without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4mm ² - cable stiffness: flexible – without cable end Control circuit: screw clamp terminals 1cable(s) 1...4mm ² - cable stiffness: flexible – with cable end Control circuit: screw clamp terminals 2cable(s) 1...2.5 mm ² - cable stiffness: flexible – with cable end Control circuit: screw clamp terminals 1cable(s) 1...4mm ² - cable stiffness: solid – without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4mm ² - cable stiffness: solid – without cable end Power circuit: screw clamp terminals 1cable(s) 2.5...10 mm ² - cable stiffness: flexible – without cable end Power circuit: screw clamp terminals 2 cable(s) 2.5...10 mm ² - cable stiffness: flexible-without cable end Power circuit: screw clamp terminals 1cable(s) 1...10 mm ² -cable stiffness: flexible-with cable end Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm ² -cable stiffness: flexible-with cable end Power circuit: screw clamp terminals 1cable(s) 1.5...10 mm ² -cable stiffness: solid-without cable end Power circuit: screw clamp terminals 2cable(s) 2.5...10 mm ² -cable stiffness: solid-withoutcable end
Tightening torque	Control circuit: 1.7 N.m – on screw clamp terminals – with screw driver flat Ø6 mm Control circuit: 1.7 N.m – on screw clamp terminals – with screw driver Philips No 2 Power circuit: 2.5 N.m – on screw clamp terminals – with screw driver flat Ø6 mm Power circuit: 2.5 N.m – on screw clamp terminals – with screw driver Philips No 2
Operating time	4...19 ms opening 12...22 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load self declare - conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load self declare - conforming to EN/ISO 13849-1
Mechanical durability (Millions)	15 Mcycles
Operating rate	3600 cyc/h at <= 60°C



Complementary

Coil technology	without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc at 60°C drop – out 50/60Hz 0.8...1.1 Uc at 60°C operational 50Hz 0.85...1.1 Uc at 60°C operational 60Hz
Inrush power in VA	70 VA at 20°C (cosφ0.75) 60Hz 70 VA at 20°C (cosφ0.75) 50Hz
Hold – in power consumption in VA	7.5 VA at 20°C (cosφ0.3) 60Hz 7 VA at 20°C (cosφ0.3) 50Hz
Heat dissipation	2...3W at 50/60Hz
Auxiliary contacts type	Type mechanically linked (1 NO + 1 NC) self declare - conforming to IEC 60947-5-1 Type mirror contact (1 NC) self declare - conforming to IEC 60947-4-1
Signaling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signaling circuit
Minimum switching voltage	17 V for signaling circuit
Non - over lap time	1.5 ms on de - energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)
Insulation resistance	>10 MOhm for signaling circuit

Environment

IP degree of protection	IP2x front face self declare - conforming to IEC 60529
Protective treatment	TH self declare - conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at Uc
Operating altitude	3000 m without derating in temperature
Fire resistance	850°C self declare - conforming to IEC 60695-2-1
Flame retardance	V1
Mechanical robustness	Vibrations contactors open 2 Gn, 5...300Hz Vibrations contactor closed 4Gn, 5...300Hz Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms
Height	85 mm
Width	45 mm
Depth	92 mm
Product weight	0.375 kg