

AC Semiconductor Reversing Contactor



- * Rated operational voltage up to 480 VAC
- * Rated operational current up to: 10A AC-3
- * Compact modular design 45 mm
- * Two independent potential free control inputs with mutual interlock
- * Control voltage ranges from 5-24 V DC or 24-230 V AC/DC
- * LED Status indication
- * IP-20 Protection
- * Meets IEC 947-4-2 / EN 60947-4-2 requirements
- * Requires only 45 mm DIN rail space



Product Description and Item Selection

3 Phase semiconductor reversing contactor designed to switch 3 phase motors forward and reverse. Unique electronic and thermal design ensures high switching capacity and long lifetime. Zero Voltage turn-On reduces RFI

Line Voltage	Control Voltage	Motor Load	Item No.
208-240 VAC 50/60Hz	5 - 24 V DC	3.0 HP	SRC 3 DD 4010
208-240 VAC 50/60Hz	24 - 230 V AC/DC	3.0 HP	SRC 3 DA 4010
400-480 VAC 50/60Hz	5 - 24 V DC	5.5 HP	SRC 3 DD 4010
400-480 VAC 50/60Hz	24 - 230 V AC/DC	5.5 HP	SRC 3 DA 4010

Output Specifications

SRC3DX 4010

Operational current AC-3 max.	10 A
Operational current AC-4 max.	8 A
Leakage current	1 mA AC max.
Minimum operational current	10 mA AC
Duty cycle	Continuous operation

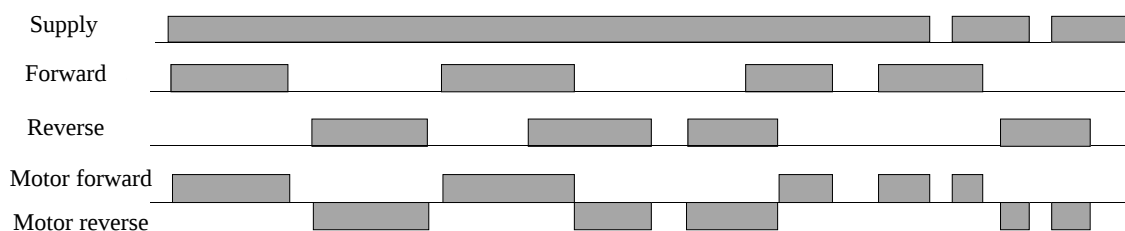
Control specifications

SRC 3 DD 4010

SRC 3 DA 4010

Control Voltage range	5 - 24 V DC	24 - 230 V AC/DC
Pick-up voltage max.	4.25 V DC	20.4 V AC/DC
Drop out voltage min.	1.5 V DC	7.2 V AC/DC
Control current / power max.	25 mA @ 4 V DC	6mA @ 24 V DC/1.5VA
Max. control voltage	26.4 V DC	253 V AC/DC
Response time max.	1/2 cycle	1 cycle
Interlock time max.	80 ms	150 ms

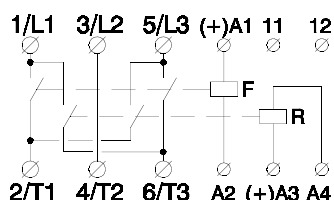
Functional Diagram



Specifications are subject to change without notice

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Wiring Diagram

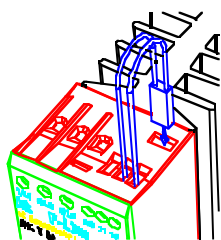


Main terminal 1/L1-2/T1& 3/L2-4/T2&5/L3-6/T3. Control terminals A1-A2 & A3-A4. Terminal 11 and 12 have no connection with the internal circuit but are intended for connection to the optional thermal overload protection. See application information page 38

Thermal Specifications

Power dissipation for continuous operation PD _{max} .	2.2 W/A
Power dissipation for intermittent operation PD	2.2 W/A duty cycle
Cooling method.	Natural convection
Mounting	Vertical +/-30°
Operating temperature range IEC 947-4-2	-0C° to 60°C
Storage temperature IEC 158-2	-20C° to 80°C

Thermal Overload Protection



Optional thermal overload protection is possible by inserting a thermostat in the slot on the right hand side of the Soft starter.
Type number UP62-100

Insulation Specifications

Rated insulation voltage	U _i 660 V
Rated impulse withstand voltage	U _{imp} 4 kV
Rated insulation voltage between AC control inputs	U _i 300 V
Rated insulation voltage between DC control inputs	U _i 60 V
Installation category	III

EMC

This component meets the requirements of the product standard IEC 158-2/HD419.2-S1 / IEC 947-4-2 / EN 60947-4-2 and is CE marked according to this standard.

Short-circuit co-ordination According to IEC 947-4-2

See page 38

Contactor Type	Co-ordination Type 1	Co-ordination Type 2	
	Max. fuse / Operating Class	Ferraz	Siemens
SRC3DX 4010	50 A gL / gG	660gRB 10-25	5SD4 80

Environment

Degree of protection / Pollution degree IP 20 / 3

Cable Wiring Information

See page 57

Approvals

CAN/CSA-C22.2 / UL Std No. 508

Dimension and Mounting Instruction

See page 57

Applications Information

See page 38

Overload Protection with MCB

See page 38

Utilisation Categories IEC947

Category AC - 3 Starting, switching off motors during running

Category AC - 4 Starting, plugging, reversing the motor rapidly while the motor is running

IEC 947

*This product has been designed for class A equipment. Use of the product in domestic environments may cause radio interference, in which case the user may be required to employ additional mitigation methods.