

- Rated operational voltage up to 600VAC 50/60 Hz
- Rated operational current up to 15/30A/50/63A AC-1
- Control voltage from 5-24 VDC or 24-230 VAC/DC
- Compact modular design 22.5, 45, or 90 mm
- LED Status indication
- Meets EN 60947-4-3 requirements
- Requires no additional components
- Built-in varistor protection
- IP-20 Protection

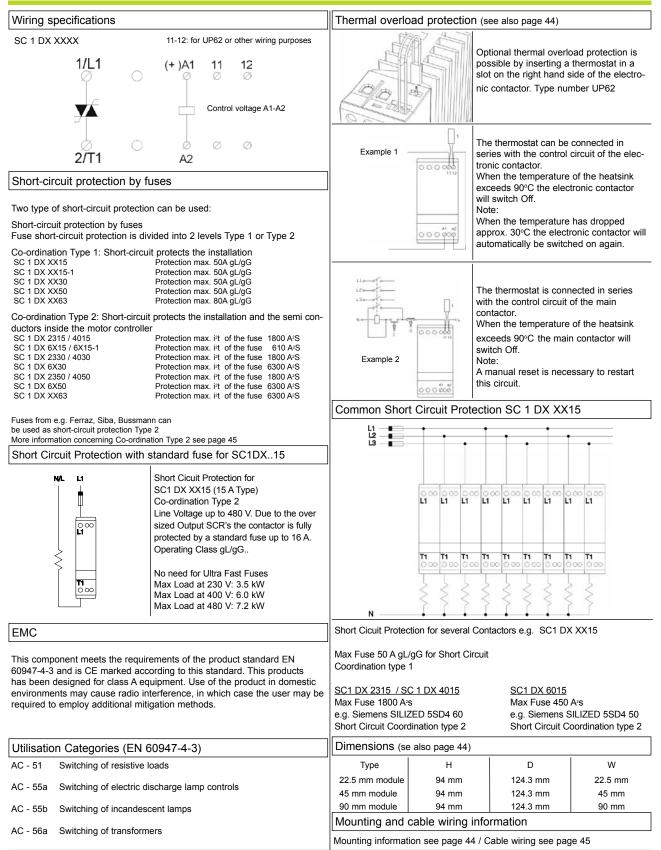
Item se	lection ar	nd techni	cal speci	fications	3												
Load AC-1/51 Heating - element	Load AC-3 Motor	Load AC-55b Lamp	Load AC-56a Trans- former	Contro voltage	-	Item nummer 12-240VAC 50/60Hz Line Voltage	by	Item nummer by 24-480VAC 50/60Hz Line Voltage	Item nummer b 24-600VAC 50/60Hz Line Voltage	У		Modul- breite					
454	15A	454	454	5-24 VE	C	SC 1 DD 231	5	SC 1 DD 4015	SC 1 DD 6015			22.5mm					
15A	10A by 600 VAC	15A 15A		24-230	VAC/DC	SC 1 DA 231	5	SC 1 DA 4015	SC 1 DA 6015			22.5mm					
	454	004	45.4	454	45.4	45.4	15.4	45.4	5-24 VE	C	SC 1 DD 233	D	SC 1 DD 4030				45mm
30A	15A	20A	15A	24-230	VAC/DC	SC 1 DA 2330	)	SC 1 DA 4030				45mm					
50.4	454		454	454	454	15A	5-24 VE	C			SC 1 DD 4050				90mm		
50A	15A	20A	15A	24-230	VAC/DC			SC 1 DA 4050				90mm					
				5-24 VE	)C			SC 1 DD 4063 *	SC 1 DD 6063 *			90mm					
63A	30A	40A	30A	24-230	VAC/DC			SC 1 DA 4063 *				90mm					
Output	load spec	ification							•	I							
Leakage current				1mA ACmax.		Min. operational current			10mA								
Duty cycle				100%													

### Duty cycle

Control terminal specifications								
SC 1 DD XXXX (DC)		SC 1 DA XXXX (AC/DC)						
Control voltage	5-24 VDC	Control voltage	24-230 VAC/DC					
Pick-up voltage max.	4.25 VDC	Pick-up voltage max.	20.4 VAC/DC					
Drop-out voltage min.	1.5 VDC	Drop-out voltage min.	7.2 VAC/DC					
Control current voltage	15 mA@24 VDC	Control current / power max.	6 mA / 1.5VA@24 VDC					
Max. control voltage	32 VDC	Max. control voltage	253 VAC/DC					
Response time max.	1/2 cycle	Response time max.	1 cycle					

Thermal specification							
Power dissipation for continuous operation PDmax	1.2 W/A	Operation in ambient temperatures exceeding 40°C is possible if the power dissipation is limited either by reducing the steady-state current or by reducing					
Power dissipation for intermittent operation PD	1.2 W/A x dutycycle	the duty-cycle as shown	in the table. N	lax.cycle time	15min.		
Cooling method	Natural convection	Ву 40°С Ву 50°С		Ву 60∘С			
Mounting	Vertical +/-30°	100% load Duty-cycle 100%	80% load Duty	-cycle max. 0.8	70% load Duty-cycle max. 0.65		
Operating temperature range EN 60947-4-3	-5°C to 40°C	Environment					
Max. operating temperature with current derating	60°C	Degree of protection	IP 20 Pollution d		egree	3	
Storage temperature EN 60947-4-3	-20°C to 80°C	Approval		•			
Insulation specifications		CUL Std No. 508. Not ap	proved SC1 D	X 6015-1 + SC	1 DX XX63 + SC1	DX 69XX	
Rated insulation voltage	Ui 660 Volt	UL:Use thermal overload protection as required by the National Electric Code. When protected by a non-time delay K5 or H Class fuse, rated					
Rated insulation voltage #	Ui 690 Volt	266% of motor FLA, this device is rated for use on a circuit capable of deli vering not more than 5,000 rms. symmetrical amperes, 600 V maximum.					
Rated impulse withstand voltage	Uimp. 4 kVolt	Maximum surrounding t					
Installation catagory	Ш						

### 1 Phase electronic contactor (SC 1)



# 1 Phase dual pole electronic contactor (SC 2)



- Rated operational voltage up to 600VAC 50/60 Hz
- Rated operational current up to 30 / 50A AC-1 (accumulated)
- Control voltage from 5-24 VDC or 24-230 VAC/DC
- Compact modular design 45 or 90 mm
- LED Status indication
- Meets EN 60947-4-3 requirements
- Requires no additional components
- Built-in varistor protection
- IP-20 Protection

### Item selection and technical specifications

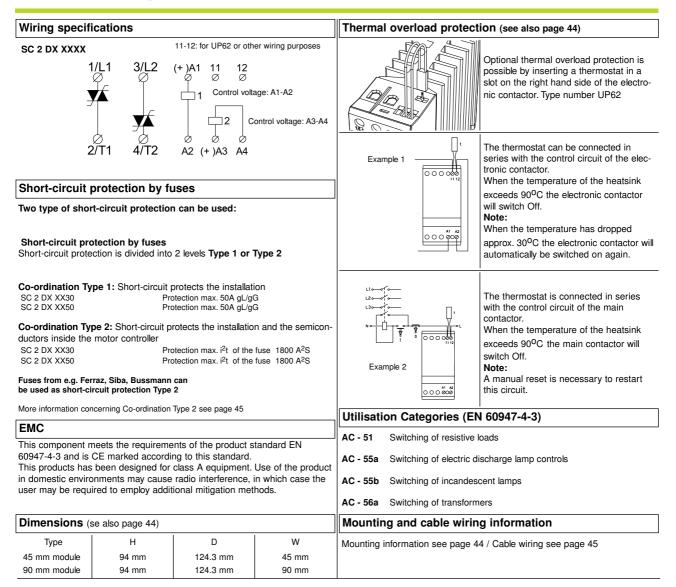
Load AC-1/51 Heating- element	Load AC-3 Motor	Load AC-55b Lamp	Load AC-56a Trans- former	Control voltage		Item number by 24-480VAC 50/60Hz Line Voltage		Module- width					
30A1	15A	20.4	15A	5-24 VDC		SC 2 DD 4030		45mm					
accumulated	- I ISA I ZUA	204		24-230 VAC/DC		SC 2 DA 4030		45mm					
50A1	A <sup>1</sup> 454 004	20.4	20.4	20.4	20.4	20A	150	15A	5-24 VDC		SC 2 DD 4050		90mm
accumulated	15A	204	IJA	24-230 VAC/DC		SC 2 DA 4050		90mm					

 $^1 The indicated loads are accumulated. E.g. the total sum of the current in L1 & L2 (1x30A <math display="inline">\,$  or 2x15A )

### Output load specification

Output load specification						
Leakage current	1mA ACmax.	Min. operational current			10mA	
Duty cycle	100%					
Control terminal specifications						
SC 2 DD XXXX (DC)		SC 2 DA XXXX (AC/DC	;)			
Control voltage	5-24 VDC	Control voltage			24-230 VAC/D	С
Pick-up voltage max.	4.25 VDC	Pick-up voltage max.			20.4 VAC/DC	
Drop-out voltage min.	1.5 VDC	Drop-out voltage min.			7.2 VAC/DC	
Control current voltage	15 mA@24 VDC	Control current / power	max.		6mA / 1.5VA@24 VDC	
Max. control voltage	32 VDC	Max. control voltage			253 VAC/DC	
Response time max.	1/2 cycle	Response time max.			1 cycle	
Thermal specification		·				
Power dissipation for continuous operation PDmax	2.2 W/A accumulated	Operation in ambient temperatures exceeding 40°C is possible if the power dissipation is limited either by reducing the steady-state current or by reducing				
Power dissipation for intermittent operation PD	2.2 W/A x dutycycle	the duty-cycle as shown				reducing
Cooling method	Natural convection	By 40°C	By 50 <sup>o</sup> C		By 60 <sup>o</sup> C	
Mounting	Vertical +/-30 <sup>0</sup>	100% load Duty-cycle 100%	80% load Duty-cycle max. 0.8		70% load Duty-cycle max. 0.65	
Operating temperature range EN 60947-4-2	-5 <sup>0</sup> C to 40 <sup>0</sup> C	Environment				
Max. operating temperature with current derating	60 <sup>0</sup> C	Degree of protection IP 20 Pollution d		Pollution de	egree	3
Storage temperature EN 60947-4-2	-20 <sup>o</sup> C to 80 <sup>o</sup> C	Approval				
Insulation specifications	ULc Std No. 508					
Rated insulation voltage	Ui 660 Volt	UL:Use thermal overload protection as required by the National Elec Code. When protected by a non-time delay K5 or H Class fuse, rated				
Rated impulse withstand voltage	Uimp. 4 kVolt	of motor FLA, this device is rated for use on a circuit capable of delivering not more than 5,000 rms. symmetrical amperes, 600 V maximum.				elivering
Installation catagory	ш	Maximum surrounding t		•		
		1				

# 1 Phase dual pole electronic contactor (SC 2)



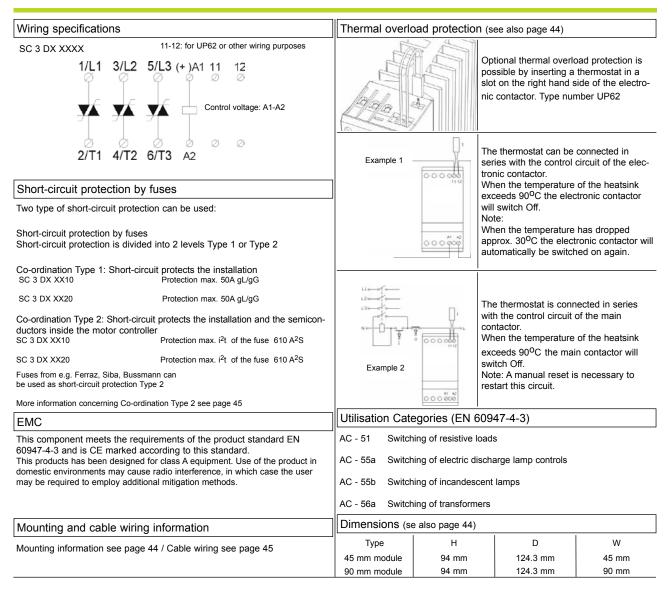


- Rated operational voltage up to 600VAC 50/60 Hz
  - Rated operational current up to 10 ,15 and 20 A AC-1
  - Control voltage from 5-24 VDC or 24-230 VAC/DC
  - Compact modular design 45 or 90 mm
  - LED Status indication

  - Meets EN 60947-4-3 requirements
    Requires no additional components
  - Built-in varistor protection
  - IP-20 Protection

Item se	lection a	nd techni	cal speci	fication	s							
Load AC-1/51 Heating- element	Load AC-3 Motor	Load AC-55b Lamp	Load AC-56a Trans- former	Contro voltage				Item numbe 24-480VAC Line Voltage	50/60Hz			Module- width
104	10A 10A 5A 5-24 VDC				SC 3 DD 40	10	SC 3 DD 60	10	45mm			
10A	10A	10A	5A	24-230	VAC/DC			SC 3 DA 40	10	SC 3 DA 60	45mm	
				5-24 VI	DC			SC 3 DD 40	20			90mm
20A	10A	10A	5A	24-230	VAC/DC			SC 3 DA 40	20			90mm
Output	load spe	cification	1			I		1		I		1
Leakage current 1mA ACmax.						ax.	Min. opera	ational current	t		10mA	
Duty cycl	le				100%							
Control	termina	l specifica	ations				-					
SC 3 DD	XXXX (D	C)					SC 3 DA XXXX (AC/DC)					
Control v	oltage				5-24 VDC		Control voltage			24-230 VAC/DC		
Pick-up v	oltage ma	x.			4.25 VDC		Pick-up voltage max.			20.4 VAC/DC		
Drop-out	voltage m	in.			1.5 VDC		Drop-out voltage min.				7.2 VAC/DC	
Control c	urrent volt	age			15 mA@2	4 VDC	Control current / power max.				6mA / 1.5VA@24 VDC	
Max. con	trol voltag	e			32 VDC		Max. control voltage 2				253 VAC/DC	
Response	e time ma	x. (ON/OFF	)		1/2 cycle		Response time max. (ON/OFF) 1 cycle					
Therma	al specifi	cation			-		-					
Power dis	ssipation fo	or continuou	s operation	PDmax	3.3 W/A		Operation in ambient temperatures exceeding 40 <sup>o</sup> C is possible if the pow dissipation is limited either by reducing the steady-state current or by reduc					
Power dis	ssipation f	or intermitte	ent operatio	n PD	3.3 W/A x	dutycycle	the duty-cy	ycle as shown	in the table.	lax.cycle time	15min.	
Cooling n	nethod				Natural co	nvection	By 40 <sup>o</sup> C By 50 <sup>o</sup> C			By 60 <sup>0</sup> C		
Mounting	I				Vertical +/	-30 <sup>0</sup>	100% load	Duty-cycle 100%	80% load Dut	y-cycle max. 0.8	70% load Dut	y-cycle max. 0.65
Operatino	g tempera	ture range E	EN 60947-4	-3	-5 <sup>0</sup> C to 40	)°C	Environ	ment				
Max. operating temperature with current derating					60 <sup>0</sup> C		Degree of	protection	IP 20	Pollution de	egree	3
Storage temperature EN 60947-4-3 -20°C to 80°C					30 <sup>0</sup> C	Approva	al		•		1	
Insulation	on speci	fications			1		cUL Std N	lo. 508 (Not				
Rated ins	sulation vo	ltage			Ui 660 V	′olt	Code. Wh	hermal overloaten protected	by a non-time	e delay K5 or	H Class fuse	, rated
Rated im	pulse with	stand voltag	ge		Uimp. 4 k	Volt		notor FLA, this more than 5,				
Installatic	on catagor	у			ш			surrounding t				

### 3 Phase electronic contactor (SC 3)



# 3-Phase electronic reversing contactor



- Rated operational voltage up to 480 VAC 50/60Hz
  Rated operational current up to 10A AC-3
  Two independent control inputs with mutual interlock
  Control voltage from 5-24VDC or 24-230VAC/DC
  LED Status indication

- Meets EN 60947-4-2 requirements
- Requires only 45 mm DIN rail space

Load ratings AC-53 motor load stand. AC-4 motor load inching / plugging	Control voltage		Item number by 24-480VAC 50/60Hz Line Voltage			Module-	width	
10A AC-53 / 8A AC-4	5-24 VDC		SRC 3 DD 4010			45mm		
10A AC-53 / 8A AC-4	24-230 VAC/DC		SRC 3 DA 4010			45mm		
Output load speci	fication	1	1	1				
Operational current AC-	-3	10A	Leakage current			5mA AC	max.	
Operational current AC-	-4	8A	Min. operational current			50mA		
Duty cycle		100%						
Control terminal s	pecifications	·	•					
SRC 3 DD 4010			SRC 3 DA 4010					
Control voltage		5 - 24 VDC	Control voltage			24- 230	VAC/DC	
Pick-up voltage max.		4.25 VDC	Pick-up voltage max.			20.4 VAC	C/DC	
Drop-out voltage min.		1.5 VDC	Drop-out voltage min.			7.2 VAC/DC		
Control current		25mA @ 4VDC	Control current / power	current / power max.			5VA@24VDC	
Response time max.		1/2 cycle	Response time max.			1cycle		
Interlock time max.		80 msec.	Interlock time max.	Interlock time max.			c.	
Thermal specifica	tion							
Power dissipation for cor	ntinuous operation PDmax	2.2 W/A	Operation in ambient ten					
Power dissipation for int	termittent operation PD	2.2 W/A x dutycycle	dissipation is limited eith the duty-cycle of the con					
Cooling method		Natural convection	By 40 <sup>o</sup> C	By 50°C		By 60 <sup>0</sup> C		
Mounting		Vertical +/-30 <sup>0</sup>	100% load Duty-cycle 100%				Duty-cycle max. 0.65	
Operating temperature	range EN 60947-4-2	-5C <sup>0</sup> to 40 <sup>0</sup> C	Environment					
Storage temperature EN	N 60947-4-2	-20C <sup>0</sup> to 80 <sup>0</sup> C	Degree of protection IP 20 Pollution de			aree	3	
Max. operating temperatu	re with current derating	60 <sup>0</sup> C	*This products has been		1		he product in	
Insulation specific	ations		domestic environments m	ay cause radi	o interference,			
Rated insulation voltage	9	Ui 660 Volt	be required to employ additional mitigation methods.           *UL:Use thermal overload protection as required by the National Electric Code					
Rated impulse withstand	d voltage	Uimp. 4 kVolt	When protected by a non	time delay K5	or H Class fue	se, rated 266	6% of motor	
Installation catagory III			FLA, this device is rated for use on a circuit capable of delivering not more than 5,000 rms. symmetrical amperes, 600 V maximum. Maximum surrounding tem- perature 40°C.					
Functional diagram	m		Approval					
			ULc Std No. 508 / CAN	CSA-C22.2				
Mains L1,L2,L3			Mounting and cab	le wiring i	nformatior	ı		
Reverse A3-A4			Mounting information se	e page 36 /	Cable wiring s	ee page 37	7	
Motor forward			Dimensions (se also	page 36)				
Motor reverse			Туре	Н	D		W	
			45 mm module	94 mm	128.1 m	m	45 mm	

#### Specifications are subject to change without notice

## 3-Phase electronic reversing contactor

