



Electronic Products and Relays 2014

All I need - Selection tables

Electronic products and relays

The product range



1 Time relays, CT range

Three ranges of electronic timers provide timing functions for all applications: the CT-D range with a width of just 17.5 mm; the CT-E range, the ideal solution for serial applications; and the CT-S range that has two different types of connection terminals and is ideally suited for universal use. The CT range has a wide variety of timing functions (from ON or OFF delay to star-delta changeover). The time relays are available with output relays, solid-state outputs and precise direct time adjustment.



2 Measuring and monitoring relays, CM range

State of the Art monitors for single and three-phase systems. Monitoring of: voltage, current, frequency, power factor (motor load), thermistors, temperature, liquid level, insulation resistance, and grid feeding. ABB has one of the world's widest product ranges of measuring and monitoring relays. The CM range is a key product line of the EPR range.



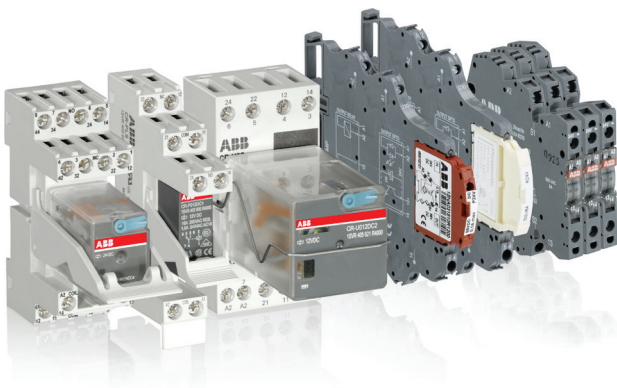
3 Power supplies, CP range

Modern power supply units are a vital component in most areas of energy management and automation technology. As your global partner in this area, ABB pays close attention to corresponding requirements. Innovation is the key to the substantial enlargement of our power supply product range. ABB offers four different product lines for single and three-phase supplies, output voltages 5/12/24, and 48 VDC in plastic and metal enclosure, as well as various accessories.



4 Signal converters, CC range and ILPH

The ABB serial data converters allow communication to be established between units with different communication standards. In order to assure process continuity, existing systems must be updated consistently or connected to new devices. Serial data enables communication to be established if the communication standard of the existing system and the connected device vary. As well as converting signals, analog signal converters and serial data converters can amplify, filter or separate signals.



5 Interface relays and optocouplers, CR range and R500 / 600

Interface relays and optocouplers are widely used in various industrial applications. As an interface, they link the controller, e.g. PLC (programmable logic controller), PC or field bus systems to the sensor/actuator level. Here, they have various functions: switching AC or DC loads with different resistive, inductive and capacitive parts, switching voltages from a few mV up to 250 V, switching currents from a few mA up to 16 A, amplification of weak control signals, electrical isolation of control and load circuits, and signal multiplying.



6 Logic relays, CL range

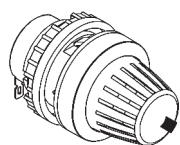
CL range logic relays are suitable for small and medium-sized control tasks and can substitute logic wiring quickly and easily. Three different ranges are available: stand alone, expandable and the display systems.

CT-D & CT-S Range

4 ABB | EPR Selection Tables 2014 | 2CDC110083C0201

Time Relays

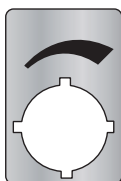
CT-D & CT-S Range - Accessories & Dimensions



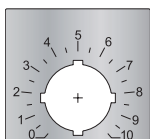
MT-x50B



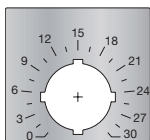
30 mm adapters



Marker label
29.6 x 44.5 mm



Marker label
with scale 0-10
48.5 x 44.5 mm



Marker label
with scale 0-30
48.5 x 44.5 mm

Remote potentiometer

50 k Ω \pm 20 % - 0,2 Ω , degree of protection IP66

Material	Diameter in mm	Type	Order code	Pack.- unit pieces	Weight 1 piece g / oz
Plastic, black	22.5	MT-150B	1SFA611410R1506	1	0.040
Plastic, chrome	22.5	MT-250B	1SFA611410R2506	1	0.040
Metal, chrome	22.5	MT-350B	1SFA611410R3506	1	0.048

30 mm adapter for attaching the potentiometer 22 mm in 30 mm mounting hole

Material	Type	Order code	Pack.- unit pieces	Weight 1 piece g / oz
Plastic, black	KA1-8029	1SFA616920R8029	1	
Metal, chrome	KA1-8030	1SFA616920R8030	1	

Marker label

Caption	Type	Order code	Pack.- unit pieces	Weight 1 piece g / oz
Symbol (see illustration)	SK 615 562-87	GJD6155620R0087	1	0.002
Scale 0 - 10	SK 615 562-88	GJD6155620R0088	1	0.002
Scale 0 - 30	MA16-1060	1SFA611940R1060	1	0.002

Accessories

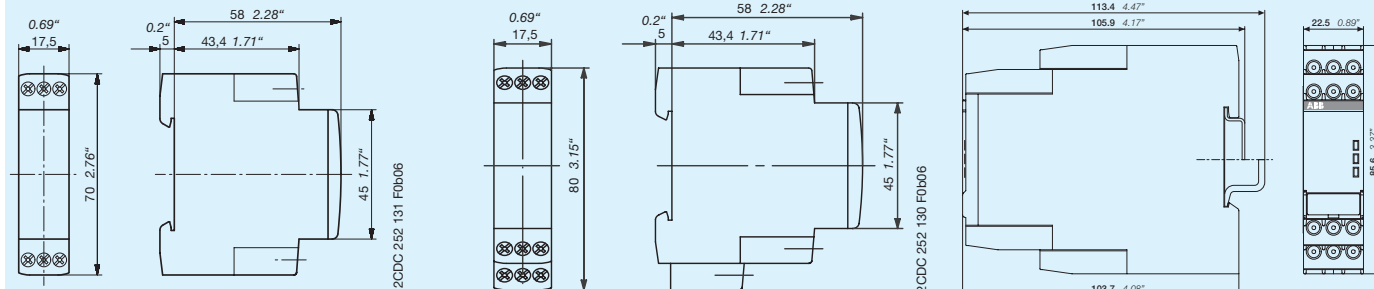
Material	for devices	Type	Order code	Pack.- unit pieces	Weight 1 piece g / oz
Adapter for screw mounting	CT-S	ADP.01	1SVR430029R0100	1	18.4/0.65
Sealable transparent cover	22.5 mm	COV.01	1SVR430005R0100	1	5.2/0.18
Sealable transparent cover	CT-S.P/S	COV.11	1SVR730005R0100	1	4 / 0.129
	22.5 mm				

Marker label

Material	for devices	Type	Order code	Pack.- unit pieces	Weight 1 piece g / oz
Marker	CT-S without DIP switch	MAR.01	1SVR366017R0100	10	0.19/0.007
Marker	CT-S with DIP switch	MAR.02	1SVR430043R0000	10	0.13/0.005
Marker	CT-S.S/P with DIP switch	MAR.12	1SVR730006R0000	10	0.152/0.335

Dimensional drawings

dimensions in mm



CT-D devices with
1 c/o contact or 2 n/o contacts

CT-D devices with 2 c/o contacts

1SVR 730 xxx xxx, 1SVR 740 xxx xxx

Time Relays

CT-E Range

		Order number	
Type		CT-MFE	
CT-ERE		1SVR550029R8100	
		1SVR550107R1100	
		1SVR550107R4100	
		1SVR550107R2100	
		1SVR550107R5100	
CT-AHE		1SVR550100R1100	
		1SVR550100R4100	
		1SVR550100R2100	
		1SVR550100R5100	
		1SVR550118R1100	
CT-ARE		1SVR550118R4100	
		1SVR550118R2100	
		1SVR550110R1100	
		1SVR550110R4100	
		1SVR550110R2100	
CT-WWE		1SVR550111R1100	
		1SVR550111R4100	
		1SVR550111R2100	
		1SVR550127R1100	
		1SVR550127R4100	
CT-AWE		1SVR550120R1100	
		1SVR550120R4100	
		1SVR550137R1100	
		1SVR550137R4100	
		1SVR550137R2100	
		1SVR550130R1100	
		1SVR550130R4100	
		1SVR550130R2100	
		1SVR550158R3100	
		1SVR550150R3100	
		1SVR550151R3100	
		1SVR550148R1100	
		1SVR550148R4100	
		1SVR550148R2100	
		1SVR550140R1100	
Functions			
ON-delay			
OFF-delay			
Impulse-ON			
Impulse-OFF			
Flasher starting with ON			
Flasher starting with OFF			
Pulse former			
Star-delta change-over twice ON-delayed			
Further functions			
Control Input			
without auxilliary voltage			
Time range			
0.05 s - 100 h			
0.05 s - 1 s			
0.1 s - 10 s			
0.3 s - 30 s			
3 s - 300 s			
0.3 min - 300 min			
Supply voltage			
24-240 V AC			
24-240 V AC/DC			
110-130 V AC			
24 V AC/DC			
220-240 V AC			
380-415 V AC			
Output			
c/o contact			
n/o contact			
n/c contact			
solidstate			

dimensions in mm

Technical drawing of CT-E devices showing front and side views with dimensions in mm and inches.

Front View Dimensions:

- Overall width: 88,5 mm (3.48")
- Inner width: 81 mm (3.19")
- Bottom width: 78,5 mm (3.09")

Side View Dimensions:

- Overall height: 22,5 mm (.886")
- Inner height: 78 mm (3.07")

2CDC 252 189 F0b05

CT-E devices

Single-phase current monitoring relays

adj: adjustable
sel: selectable

Measuring and Monitoring Relays

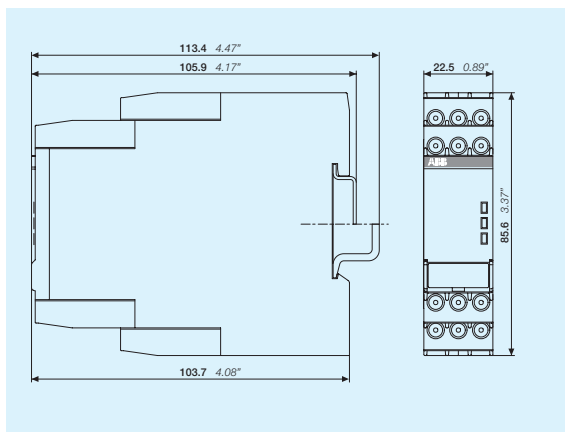
Single-phase voltage monitoring relays

	Type	Order number
	CM-ESS.1S	1SVR730830R0300
	CM-ESS.1P	1SVR740830R0300
	CM-ESS.1S	1SVR730831R0300
	CM-ESS.1P	1SVR740831R0300
	CM-ESS.1S	1SVR730831R1300
	CM-ESS.1P	1SVR740831R1300
	CM-ESS.2S	1SVR730830R0400
	CM-ESS.2P	1SVR740830R0400
	CM-ESS.2S	1SVR730831R0400
	CM-ESS.2P	1SVR740831R0400
	CM-ESS.2S	1SVR730831R1400
	CM-ESS.2P	1SVR740831R1400
	CM-ESS.MS	1SVR730830R0500
	CM-ESS.MP	1SVR740830R0500
	CM-EFS.2S	1SVR730750R0400
	CM-EFS.2P	1SVR740750R0400
Rated control supply voltage U_s		
24 - 240 V AC/DC	■	■
110 - 130 V AC		■
220 - 240 V AC		■
Measuring ranges AC/DC		
3 - 30 V	■	■
6 - 60 V	■	■
30 - 300 V	■	■
60 - 600 V	■	■
Monitoring function		
Over- or undervoltage	■	■
Windows voltage monitoring		■
Latching		sel
Open circuit or closed circuit principle		sel
Timing functions for tripping delay		
ON delay, 0 or 0.1 - 30 s		adj
ON or OFF delay		sel
Output		
c/o contact	1	2
Connection type		
Push-in terminals	■	■
Double-chamber cage connection terminals	■	■

adj: adjustable
sel: selectable

Dimensional drawings

dimensions in mm



Three Phase Monitors - Singlefunctional

adj: adjustable
sel: selectable
fix: fixed



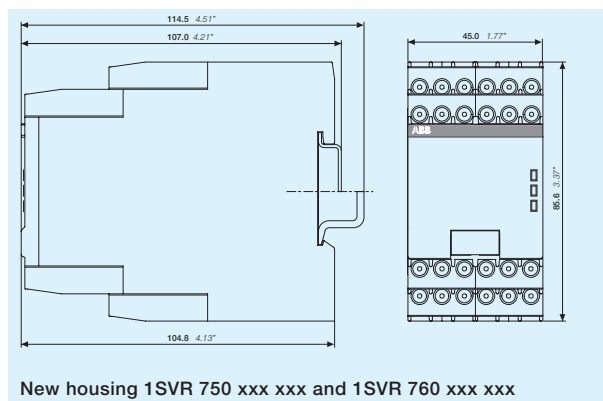
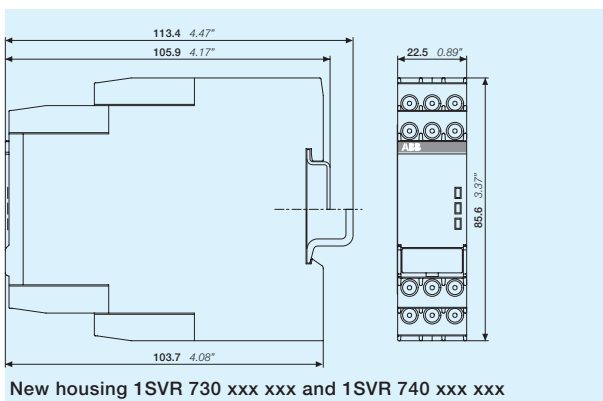
Measuring and Monitoring Relays

Three Phase Monitors - Multifunctional

Rated control supply voltage U_s	Type	Order number
	CM-MPS.11S	1SVR730885R1300
	CM-MPS.11P	1SVR740885R1300
	CM-MPS.21S	1SVR730885R3300
	CM-MPS.21P	1SVR740885R3300
	CM-MPS.31S	1SVR730884R1300
	CM-MPS.31P	1SVR740884R1300
	CM-MPS.41S	1SVR730884R3300
	CM-MPS.41P	1SVR740884R3300
	CM-MPS.23S	1SVR730885R4300
	CM-MPS.23P	1SVR740885R4300
	CM-MPS.43S	1SVR730884R4300
	CM-MPS.43P	1SVR740884R4300
	CM-MPN.52S	1SVR750487R8300
	CM-MPN.52P	1SVR760487R8300
	CM-MPN.62S	1SVR750488R8300
	CM-MPN.62P	1SVR760488R8300
	CM-MPN.72S	1SVR750489R8300
	CM-MPN.72P	1SVR760489R8300
Phase to Phase		
160-300 V AC		
300-500 V AC		
350-580 V AC		
450-720 V AC		
530-820 V AC		
Phase to Neutral		
90-170 V AC		
180-280 V AC		
Rated frequency		
50/60 Hz		
50/60/400 Hz		
Suitable for monitoring		
Single-phase mains		
Three-phase mains		
Monitoring function		
Phase failure		
Phase sequence		
Automatic phase sequence correction		
Overvoltage		
Undervoltage		
Unbalance		
Neutral ¹⁾		
Thresholds		
adj adj adj adj adj adj adj adj adj adj adj adj adj adj adj adj adj adj		
Timing functions for tripping delay		
On and OFF delay		
Connection type		
Push-in terminals		
Double-chamber cage connection terminals		

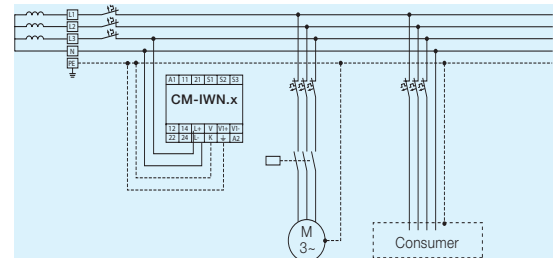
- ¹⁾ The external conductor voltage towards the neutral conductor is measured.
²⁾ Interrupted neutral monitoring

adj: adjustable
 sel: selectable



Insulation Monitoring Relays & Grid feeding monitoring relays

Insulation monitors for unearthed supply systems (IT-Systems)



	Type	Order number
	CM-UFD.M21	1SVR510730R0300
	CM-UFD.M22	1SVR560730R3400
	CM-UFS.1	1SVR630736R0300
Rated control supply voltage U_s		
24-240 V AC/DC	■	■
3 x 400 V AC (L-L) / 230 V AC (L-N)		■
Rated frequency		
DC and 50/60 Hz respectively	■	
50 Hz		■
DC or 50 Hz		■
Standards		
VDE AR-N 4105	■	
DIN V VDE V 0126-1-1: Feb. 2006		■
CEI 0-21		■
Suitable for monitoring		
Single-phase mains		■
Three-phase mains	■	■
Monitoring function		
Over-/undervoltage	■	■
Over-/underfrequency	■	■
ROCOF (rate of change of frequency)		■
10 minutes average value over-/undervoltage,	■	■
10 minutes average value overvoltage		■
Phase failure		■
Vector shift	■	
Thresholds	adj	adj

Measuring and Monitoring Relays

Motor Protection Monitoring Relays - Motor Load Monitors

	Type	Order number
	CM-LWN	1SVR450335R0000
	CM-LWN	1SVR450330R0000
	CM-LWN	1SVR450331R0000
	CM-LWN	1SVR450332R0000
	CM-LWN	1SVR450334R0000
	CM-LWN	1SVR450335R0100
	CM-LWN	1SVR450330R0100
	CM-LWN	1SVR450331R0100
	CM-LWN	1SVR450332R0100
	CM-LWN	1SVR450334R0100

Rated control supply voltage U _s											
24 - 240 VAC/DC	■					■					
110 - 130 V AC		■					■				
220 - 240 V AC			■					■			
380 - 440 V AC				■					■		
480 - 500 V AC					■					■	

Voltage range (Phase to phase)											
110- 500 V	■	■	■	■	■	■	■	■	■	■	■

Current range											
0.5 - 5 A	■	■	■	■	■						
2 - 20 A						■	■	■	■	■	■

Frequency range											
50/60 Hz		■	■	■	■		■	■	■	■	■
DC or 15 - 400 Hz		■					■				

Suitable for monitoring											
Single-phase mains	■	■	■	■	■	■	■	■	■	■	■
Three-phase mains	■	■	■	■	■	■	■	■	■	■	■

Monitoring function											
Motor load // cos Phi	■	■	■	■	■	■	■	■	■	■	■

Timing functions											
Start up delay (on delay)	adj	adj	adj	adj	adj	adj	adj	adj	adj	adj	adj
Response delay	adj	adj	adj	adj	adj	adj	adj	adj	adj	adj	adj

Output contacts											
2 x 1 c/o	■	■	■	■	■	■	■	■	■	■	■

Measuring and Monitoring Relays

Motor Protection Monitoring Relays

Thermistor Relays

Type	Order number	CM-MSE	CM-MSE	CM-MSE	CM-MSS(1)	CM-MSS(1)	CM-MSS(2)	CM-MSS(2)	CM-MSS(2)	CM-MSS(2)	CM-MSS(3)	CM-MSS(3)	CM-MSS(3)	CM-MSS(3)	CM-MSS(4)	CM-MSS(5)	CM-MSS(6)	CM-MSS(7)	CM-MSN
		1SVR550805R9300	1SVR550800R9300	1SVR550801R9300	1SVR430800R9100	1SVR430801R1100	1SVR430810R9300	1SVR430811R9300	1SVR430811R0300	1SVR430811R1300	1SVR430710R9300	1SVR430711R0300	1SVR430711R1300	1SVR430711R2300	1SVR430720R0400	1SVR430720R0300	1SVR430710R0200	1SVR430720R0500	1SVR450025R0100
Rated control supply voltage U_s																			
24 - 240 V AC/DC															■	■	■	■	■
24 V AC/DC					■		■				■								
24 V AC		■						■											
110 - 130 V AC			■						■					■					
220 - 240 V AC				■		■				■			■						
380 - 440 V AC														■					
Rated frequency																			
50/60 Hz		■	■	■	■	■	■	■	■	■	■	■	■	■					
15 - 400 Hz															■	■	■	■	■
Measuring Circuits																			
No of measuring/sensor circuits		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	6
Monitoring Functions																			
Wire break monitoring		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short circuit detection											■	■	■	■	■	■	■	■	■
Non-volatile fault storage					sel	sel	sel	sel	sel	sel	sel	sel	sel	sel	■	■		■	■
Auto reset		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Manual reset					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Remote reset					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Test button															■	■	■	■	■
Output contacts																			
1 c/o					1	1													
1 n/o		1	1	1															
2 c/o							2	2	2	2	2	2	2	2		2	2 x 1		
1 n/o + 1 n/c															1			1	1

Temperature sensor C011, standard version acc. to DIN 44081

Type	Rated response temperature T_{NF}	Color coding	Order code	Pack.-unit set
C011-70	70 °C	white-brown	GHC0110003R0001	1
C011-80	80 °C	white-white	GHC0110003R0002	1
C011-90	90 °C	green-green	GHC0110003R0003	1
C011-100	100 °C	red-red	GHC0110003R0004	1
C011-110	110 °C	brown-brown	GHC0110003R0005	1
C011-120	120 °C	gray-gray	GHC0110003R0006	1
C011-130	130 °C	blue-blue	GHC0110003R0007	1
C011-140	140 °C	white-blue	GHC0110003R0011	1
C011-150	150 °C	black-black	GHC0110003R0008	1
C011-160	160 °C	blue-red	GHC0110003R0009	1
C011-170	170 °C	white-green	GHC0110003R0010	1

Triple temperature sensor C011-3

Type	Rated response temperature T_{NF}	Color coding	Order code	Pack.-unit pieces
C011-3-150	150 °C	black-black	GHC 0110033R0008	1

Measuring and Monitoring Relays

Temperature Monitoring Relays

	New range																
	Type	Order number	CM-TCS.21S	CM-TCS.21P	CM-TCS.11S	CM-TCS.11P	CM-TCS.22S	CM-TCS.22P	CM-TCS.12S	CM-TCS.12P	CM-TCS.23S	CM-TCS.23P	CM-TCS.13S	CM-TCS.13P	C512-24	C512-W	C513-W
Rated control supply voltage U_s																	
24 V AC/DC			■	■			■	■			■	■			■		
24-240 V AC/DC					■	■			■	■			■	■		■	■
Technology																	
analogue			■	■	■	■	■	■	■	■	■	■	■	■			
digital															■	■	■
Sensor circuits (2 or 3 wire)																	
no of temperature sensors			1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
no of thresholds			2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
Sensor type																	
PT100			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
PT100, KTY83, KTY84, NTC															■	■	■
Measuring temperature range																	
-50...+50 °C			■	■	■	■											
0...+100 °C							■	■	■	■							
0...+200 °C											■	■	■	■			
-50...+500 °C															■	■	■
Monitoring function																	
overtemperature			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
undertemperature			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
window temperature			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Operating principle																	
open or closed principle			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Output contacts																	
n/o															1	1	1
c/o			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Measuring and Monitoring Relays

Liquid Level Monitoring Relays

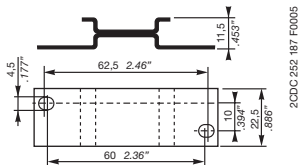
	Type	Order number																						
		CM-ENE MIN	CM-ENE MIN	CM-ENE MIN	CM-ENE MAX	CM-ENE MAX	CM-ENE MAX	CM-ENS	CM-ENS	CM-ENS	CM-ENS	CM-ENS	CM-ENS UP/DOWN	CM-ENS UP/DOWN	CM-ENS UP/DOWN	CM-ENN	CM-ENN	CM-ENN	CM-ENN	CM-ENN	CM-ENS UP/DOWN	CM-ENS UP/DOWN	CM-ENS UP/DOWN	CM-ENS UP/DOWN
		1SVR550855R9500	1SVR550850R9500	1SVR550851R9500	1SVR550855R9400	1SVR550850R9400	1SVR550851R9400	1SV4R30811R9300	1SV4R30851R0100	1SV4R30851R1100	1SV4R30851R2100	1SV4R30851R1300	1SV4R30851R9200	1SV4R30851R0200	1SV4R30851R1200	1SV4R50055R0000	1SV4R50059R0000	1SV4R50050R0000	1SV4R50051R0000	1SV4R50052R0000	1SV4R50059R0100	1SV4R50050R0100	1SV4R50051R0100	1SV4R50052R0100
Rated control supply voltage U _s																								
24 - 240 V AC/DC																■								
24 V AC		■			■			■					■				■				■			
110 - 130 V AC			■			■			■					■				■				■		
220 - 240 V AC				■				■		■					■				■				■	
380 - 415 V AC											■									■				■
Sensor circuits																								
No of electrodes (including ground reference)		2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	5	5	5	5
Response sensitivity																								
0 - 100 kOhm		■	■	■	■	■	■																	
5 - 100 kOhm								adj	adj	adj	adj	adj	adj	adj	adj						adj	adj	adj	adj
250 Ohm - 5 kOhm																adj	adj	adj	adj	adj				
2,5 - 50 kOhm																adj	adj	adj	adj	adj				
25 - 500 kOhm																adj	adj	adj	adj	adj				
Monitoring function																								
Dry-running protection		■	■	■																				
Overflow protection					■	■	■																	
Liquide level control								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Operating principle																								
Open circuit principle		■	■	■				■	■	■	■	■				■	■	■	■	■				
Closed circuit principle					■	■	■																	
Open or closed circuit principle													sel	sel	sel						sel	sel	sel	sel
Output contacts																								
n/o		1	1	1	1	1	1					1												
n/c												1									2	2	2	2
c/o								1	1	1	1		1	1	1	2	2	2	2	2	1	1	1	1

Accessories – electrodes

Type	Description	Order code	Pack. unit pieces
CM-KH-3	Compact support for 3 bar electrodes	1SVR450056R6000	1
CM-AH-3	Distance plate for 3 bar electrodes	1SVR450056R7000	1
CM-GM-1	Counter nut for 1" thread	1SVR450056R8000	1
Screw-in bar electrodes / Suspension electrode			
CM-SE-300	300 mm	1SVR450056R0000	1
CM-SE-600	600 mm	1SVR450056R0100	1
CM-SE-1000	1000 mm	1SVR450056R0200	1
CM-HE	-	1SVR402902R0000	1

Measuring and Monitoring Relays

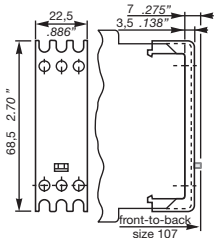
Accessories



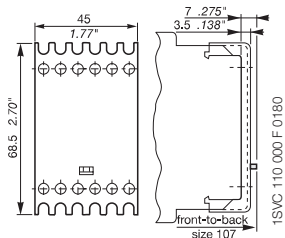
ADP.01



MAR.01



Sealable cover
COV.01



Sealable cover
COV.02

Ordering details

Description	For type	Width in mm	for devices	Type	Order code	Price	Pkg qty	Weight (1 pce) g (oz)
Adapter for screw mounting	CM-S	22.5		ADP.01	1SVR430029R0100		1	18.4 (0.65)
	CM-N	45		ADP.02	1SVR440029R0100		1	36.7 (1.30)
Marker label	CM-S, CM-N		without DIP switches	MAR.01	1SVR366017R0100		10	0.19 (0.007)
	CM-S, CM-N		with DIP switches	MAR.02	1SVR430043R0000		10	0.13 (0.005)
Sealable transparent cover	CM-S	22.5		COV.01	1SVR430005R0100		1	5.2 (0.18)
	CM-N	45		COV.02	1SVR440005R0100		1	7.7 (0.27)
	CM-S.S/P	22.5		COV.11	1SVR730005R0100		1	4.0 (0.129)
	CM-N.S/P	45		COV.12	1SVR750005R0100		1	7 (0.247)

CP Range - Single phase

	Order number	1SVR427041R1000	1SVR427043R1200	1SVR427041R0000	1SVR427043R0100	1SVR427044R0200	1SVR427045R0400		1SVR427033R3000	1SVR427032R1000	1SVR427035R1000	1SVR427030R0000	1SVR427031R0000	1SVR427032R0000	1SVR427034R0000	1SVR427035R0000	1SVR427036R0000	1SVR427030R2000	1SVR427031R2000	1SVR427034R0000	1SVR427035R2000		1SVR427014R0000	1SVR427015R0100	1SVR427016R0100	1SVR427024R0000	1SVR427025R0000	1SVR427026R0000		
		Single phase																												
		CP-D							CP-E													CP-S			CP-C					
Rated output voltage	5 V DC								■																					
	12 V DC	■	■							■	■																			
	24 V DC			■	■	■	■					■	■	■	■	■	■							■	■	■	■	■	■	
	48 V DC																	■	■	■	■									
Rated output current	0.42 A			■														■	■	■	■									
	0.625 A																	■												
	0.75 A																													
	0.83 A	■										■																		
	1.25 A												■							■										
	1.3 A				■																									
	2.1 A		■																											
	2.5 A					■					■																			
	3 A								■	■																				
	4.2 A						■							■																
	5 A															■				■			■			■				
	10 A										■				■		■				■			■			■			
	20 A																■								■			■		
	Rated output power	10 W	■		■					■																				
15 W									■																					
18 W										■		■																		
30 W			■		■					■			■						■											
60 W						■							■	■					■	■										
100 W							■																							
120 W											■				■								■			■				
240 W																	■				■			■			■			
480 W																		■				■			■			■		
Rated input voltage	100 - 240 V AC	■	■	■	■	■	■		■	■		■	■	■			■		■	■					■			■		
	115/230 V AC auto select										■				■	■				■										
	115 - 230 V AC																													
	110 - 240 V AC																■						■			■	■	■		
	110 - 120 V AC																					■		■		■	■	■		
	220 - 240 V AC																							■	■	■				
DC input voltage range	120 - 370 V DC	■	■	■	■	■	■		■			■					■								■					
	90 - 375 V DC									■			■	■				■	■											
	210 - 370 V DC										■				■	■					■									
	100 - 350 V DC																						■			■	■	■		
	220 - 350 V DC																								■	■	■			
Features	Power reserve design																						■		■		■	■	■	
	Adjustable output voltage		■		■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■		■	■	■	
	Integrated input fuse	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	
	Short circuit stable	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	
	Fold forward behavior (U/I)	■	■	■	■	■	■			■	■		■	■	■	■	■	■	■	■	■		■	■	■		■	■	■	
	Fold back behavior (hiccup)								■			■													■		■	■	■	
	Power factor correction										pas				pas	pas	act				pas	act				act	act	act		
	Ambient temp. rating -25°C (-40°C) to 70°C	■	■	■	■	■	■		■	■	■	■	■	■	pas	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	Parallel connection									■	■	3	■		■	3	3	3	■	■	■	3	3		5	5	5	5	5	5
	Serial connection	■	■	■	■	■	■		■	■	2	■	■	■	2	2	2	■	■	■	2	2		■	■	■	■	■	■	■

Switch Mode Power Supplies

CP Range - Three phase and AS-interface

		Order number										
		1SVR427054R0000	1SVR427055R0000	1SVR427056R0000	1SVR427057R0000	1SVR427054R2000	1SVR427055R2000	1SVR427056R2000	1SVR427090R0280	1SVR427090R0400	1SVR427095R0400	1SVR427090R0800
		Three phase							AS-Interface			
		CP-T							CP-ASI			
Rated output voltage	24 V DC	■	■	■	■							
	30.5 V DC								■	■	■	■
	48 V DC					■	■	■				
Rated output current	2.8 A								■			
	3 A									■	■	
	5 A	■				■						
	8 A											■
	10 A		■			■						
	20 A			■				■				
	40 A				■							
Rated output power	85 W								■			
	120 W	■										
	122 W									■	■	
	240 W		■			■						
	244 W											■
	480 W			■		■						
	960 W				■		■					
Rated input voltage	85-132 V AC, 184-264 V AC								■	■		■
	3 x 400 - 800 V AC	■	■	■	■	■	■	■				
DC input voltage range	18-32.4 V DC										■	
	480 - 820 V DC	■	■	■	■	■	■	■				
Features	Adjustable output voltage	■	■	■	■	■	■	■				
	Integrated input fuse	■	■	■	■	■	■	■				
	Short circuit stable	■	■	■	■	■	■	■				
	Fold forward behavior (U/I)	■	■	■	■	■	■	■				
	Fold back behavior (hiccup)	■	■	■	■	■	■	■				
	Power factor correction											
	Ambient temp. rating -25°C (-40°C) to 70°C	■	■	■	■	■	■	■				
	Serial connection		2	2	2	2	2	2				
	Suited for AS-Interfaces								■	■	■	■

Switch Mode Power Supplies

Accessories

Accessories CP-Range

Typ		Order number
CP-D RU	Redundancy module for CP-D range	1SVR427049R0000
CP-RUD	Redundancy module ≤ 35 V; ≤ 5 A	1SVR423418R9000
CP-A RU	Redundancy module ≤ 40 V; ≥ 5 A	1SVR427071R0000
CP-A CM	Control module for CP-A	1SVR427075R0000
CP-C MM	Messaging module for CP-C	1SVR427081R0000

Buffer modules CP-B range

Selection table

Typ	CP-B 24/3.0	CP-B 24/10.0	CP-B 24/20.0	CP-B EXT.2
Order code	1SVR427060R0300	1SVR427060R1000	1SVR427060R2000	1SVR427065R0000
Rated input voltage	24 V DC	24 V DC	24 V DC	-
Rated current	3 A DC	10 A DC	20 A DC	-
Energy storage (min.)	1000 Ws	10000 Ws	8000 Ws	2000 Ws
Typical charging time 100 %	65 s	120 s	68 s	
at load current 0 %	56 s	82 s	62 s	
Typical buffer time ¹⁾				
at load current 100 %	14 s	40 s	15 s	
50 %	28 s	80 s	30 s	
25 %	74 s	140 s	60 s	
10 %	148 s	380 s	150 s	

¹⁾ buffer time = $\frac{\text{energy storage} \times 0.9}{\text{current} \times 23 \text{ V}}$

Switch Mode Power Supplies

Accessories

Electronic Protection Devices EPD24

Selection table

Rated current I_n in A	Type code	Order number	bbn 40 16779 EAN	Weight 1 piece kg	Pack unit pc.
0.5	EPD24-TB-101-0.5A	2CDE601101R2905	829960	0.065	4
1	EPD24-TB-101-1A	2CDE601101R2001	829984	0.065	4
2	EPD24-TB-101-2A	2CDE601101R2002	830003	0.065	4
3	EPD24-TB-101-3A	2CDE601101R2003	830027	0.065	4
4	EPD24-TB-101-4A	2CDE601101R2004	830041	0.065	4
6	EPD24-TB-101-6A	2CDE601101R2006	830065	0.065	4
8	EPD24-TB-101-8A	2CDE601101R2008	830089	0.065	4
10	EPD24-TB-101-10A	2CDE601101R2010	830102	0.065	4
12	EPD24-TB-101-12A	2CDE601101R2012	830126	0.065	4

Selection table accessories EPD24

	Type code	Order number	bbn 40 16779 EAN	Weight 1 piece kg	Pack unit pc.
Busbars for LINE+ and 0 V, grey insulation, length 500 mm ¹⁾	EPD-BB500	2CDE605100R0500	830140	0.20	10
Signal Bars for aux. contacts, grey insulation, length 21 mm	EPD-SB21	2CDE605200R0021	830164	0.04	10

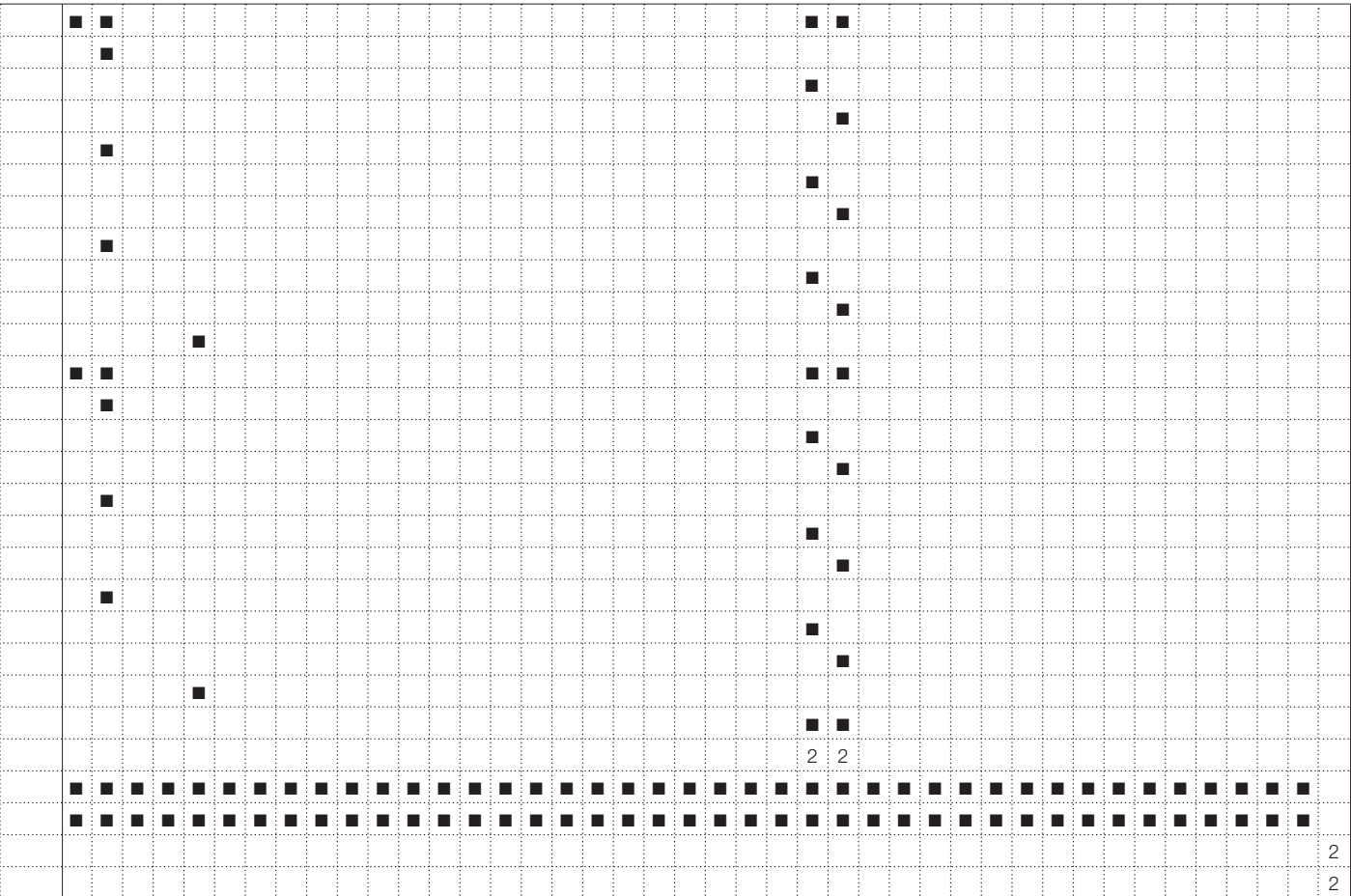
¹⁾ Max. load with one line entry $I_{max} = 50$ A (recommended: center-feeding)

Max. load with two line entries $I_{max} = 63$ A

CC Range

Standard Signal Converters	
Type	Order number
CC-E/STD	1SVR011700R0000
CC-E V/V	1SVR011710R2100
CC-E V/I	1SVR011711R1600
CC-E V/I	1SVR011712R1700
CC-E I/V	1SVR011713R1000
CC-E I/I	1SVR011714R1100
CC-E I/I	1SVR011715R1200
CC-E I/V	1SVR011716R1300
CC-E I/I	1SVR011717R1400
CC-E I/I	1SVR011718R2500
CC-E V/V	1SVR011719R2600
CC-E/STD	1SVR011705R2100
CC-E V/V	1SVR011720R2300
CC-E V/I	1SVR011721R1000
CC-E V/I	1SVR011722R1100
CC-E I/V	1SVR011723R1200
CC-E I/I	1SVR011724R1300
CC-E I/I	1SVR011725R1400
CC-E I/V	1SVR011726R1500
CC-E I/I	1SVR011727R1600
CC-E I/I	1SVR011728R2700
CC-E V/V	1SVR011729R2000
CC-E/I-1	1SVR010200R1600
CC-E/I-2	1SVR010201R0300
CC-U/STD	1SVR040000R1700
CC-U/STD	1SVR040001R0400
CC-U/STDR	1SVR040010R0000
CC-U/STDR	1SVR040011R2500

Output signal	
0 - 5 V	■
0 - 10 V	■
1 - 5 V	■
2 - 10 V	
-10 - +10 V	■
-5 - +5 V	
-10 - 0 V	
-5 - 0 V	
0 - 6.66 V	
-10 - +3.33 V	■
-5 - +1.66 V	■
0 - 8 V	
0 - 4 V	
-10 - 2 V	
-5 - 1 V	
1.25 - 6.25 V	
-7.5 - +2.5 V	
-3.75 - +1.25 V	
1.66 - 8.33 V	
-6.66 - +6.66 V	
-3.33 - +3.33 V	
-8 - 0 V	
-4 - 0 V	
0 - 1 mA	■
0 - 20 mA	■
4 - 20 mA	■
0 - 10 mA	■
0 - 0.5 mA	
0 - 13.33 mA	
0 - 666 µA	
0 - 16 mA	
0 - 800 µA	
0 - 8 mA	
0 - 400 µA	
2.5 - 12.5 mA	
125 - 625 µA	
3.33 - 16.66 mA	
166 - 833 µA	
0.2 - 1 mA	
2 - 10 mA	
100 - 500 µA	
Relay output	



Temperature Signal Converters

CC Range

RTD Converters

RTD Converters		Supply voltage U _s		Input signal		PT100		PT10		PT1000																												
Type	Order number	24 V DC	110 - 240 V AC	24 - 48 V DC	24 V AC	100 - 300 V DC	0 - 50 °C	0 - 60 °C	0 - 70 °C	0 - 80 °C	0 - 90 °C	0 - 100 °C	0 - 200 °C	0 - 300 °C	0 - 400 °C	0 - 500 °C	0 - 600 °C	0 - 800 °C	-50 °C - +50 °C	-50 °C - +450 °C	-50 °C - +250 °C	0 - 500 °C	0 - 550 °C	0 - 600 °C	0 - 650 °C	0 - 700 °C	0 - 750 °C	0 - 800 °C	0 - 850 °C	0 - 10 °C	0 - 20 °C	0 - 30 °C	0 - 40 °C	0 - 50 °C	0 - 60 °C			
CC-E/RTD	1SVR011701R2500	■										■		■		■			■	■	■																	
CC-E RTD/V	1SVR011730R2500	■										■																										
CC-E RTD/I	1SVR011731R1200	■										■																										
CC-E RTD/I	1SVR011732R1300	■										■																										
CC-E RTD/V	1SVR011733R1400	■																	■																			
CC-E RTD/I	1SVR011734R1500	■																	■																			
CC-E RTD/I	1SVR011735R1600	■																	■																			
CC-E RTD/V	1SVR011736R1700	■												■																								
CC-E RTD/I	1SVR011737R1000	■												■																								
CC-E RTD/I	1SVR011738R2100	■												■																								
CC-E RTD/V	1SVR011739R2200	■																			■																	
CC-E RTD/I	1SVR011740R0700	■																		■																		
CC-E RTD/I	1SVR011741R2400	■																		■																		
CC-E/RTD	1SVR011706R2200		■									■		■		■			■	■	■																	
CC-E RTD/V	1SVR011788R2400		■									■																										
CC-E RTD/I	1SVR011789R2500		■									■																										
CC-E RTD/I	1SVR011790R2200		■									■																										
CC-E RTD/V	1SVR011791R1700		■																■																			
CC-E RTD/I	1SVR011792R1000		■																■																			
CC-E RTD/I	1SVR011793R1100		■																■																			
CC-E RTD/V	1SVR011794R1200		■											■																								
CC-E RTD/I	1SVR011795R1300		■											■																								
CC-E RTD/I	1SVR011796R1400		■											■																								
CC-E RTD/V	1SVR011797R1500		■																	■																		
CC-E RTD/I	1SVR011798R2600		■																	■																		
CC-E RTD/I	1SVR011799R2700		■																	■																		
CC-U/RTD	1SVR040002R0500			■	■		■	■	■	■	■	■	■	■	■	■						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CC-U/RTD	1SVR040003R0600		■			■	■	■	■	■	■	■	■	■	■	■						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CC-U/RTDR	1SVR040012R2600			■	■							■	■		■		■	■																				
CC-U/RTDR	1SVR040013R2700		■			■						■	■		■		■	■																				

Output signal	
0 - 5 V	
0 - 10 V	
1 - 5 V	
2 - 10 V	
-10 - +10 V	
-5 - +5 V	
-10 - 0 V	
-5 - 0 V	
0 - 6.666 V	
-10 - +3.33 V	
-5 - +1.66 V	
0 - 8 V	
0 - 4 V	
-10 - -2 V	
-5 - -1 V	
1.25 - 6.25 V	
-7.5 - +2.5 V	
-3.75 - +1.25 V	
1.66 - 8.33 V	
-6.66 - +6.66 V	
-3.33 - +3.33 V	
-8 - 0 V	
-4 - 0 V	
0 - 1 mA	
0 - 20 mA	
4 - 20 mA	
0 - 10 mA	
0 - 0.5 mA	
0 - 13.33 mA	
0 - 666 µA	
0 - 16 mA	
0 - 800 µA	
0 - 8 mA	
0 - 400 µA	
2.5 - 12.5 mA	
125 - 625 µA	
3.33 - 16.66 mA	
166 - 833 µA	
0.2 - 1 mA	
2 - 10 mA	
100 - 500 µA	
Relay output	

Thermocouple Signal Converters

CC Range

Thermocouple Converters

Thermocouple Converters

Type	Order number	Supply voltage U _s					Input signal																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		24 V DC	110 - 240 V AC	24 - 48 V DC	24 V AC	100 - 300 V DC	0...1000 °C	type K	0 - 100 - 900 °C	type K	0 - 250 - 1350 °C	type K	0 - 600 °C	type J	0 - 100 - 750 °C	type J	0 - 100 - 400 °C	type T	-150 - 0 - 400 °C	type T	0 - 250 - 1550 °C	type S	0 - 100 - 700 °C	type E	0 - 200 - 1000 °C	type E	0 - 100 - 650 °C	type N	0 - 200 - 1300 °C	type N	0 - 250 - 1350 °C	type R	0 - 450 - 1700 °C	type R	0 - 700 - 1750 °C	type B	0 - 2 - 10 mV	mV	0 - 10 - 50 mV	mV	0 - 240 °C	type J	0 - 480 °C	type J	0 - 1200 °C	type J	0 - 250 °C	type K	0 - 500 °C	type K	0 - 1350 °C	type K	-150 - +120 °C	type T	0 - 220 °C	type T	0 - 400 °C	type T	0 - 210 °C	type S	0 - 380 °C	type S																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
CC-E/TC	1SVR011702R2600	■					■					■																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

Measuring Converters

CC Range

Type	Order number	Supply voltage U _s					Input signal					Current										Voltage										Output signal										Voltage									
		24 V DC	110 - 240 V AC	24 - 48 V DC	24 V AC	100 - 300 V DC	0 - 1 A, AC	0 - 5 A, AC	0 - 20 A, AC	0 - 5 A, DC	0 - 20 A, DC	0 - 100 V	0 - 150 V	0 - 250 V	0 - 300 V	0 - 400 V	0 - 450 V	0 - 550 V	0 - 600 V	loop powered	any wave form 0-600Hz	0 - 5 V	0 - 10 V	1 - 5 V	2 - 10 V	-10 - +10 V	-5 - +5 V	-10 - 0 V	-5 - 0 V	0 - 0.666 V	-10 - +3.33 V	-5 - +1.66 V	0 - 8 V																		
CC-E/I	1SVR011703R2700	■						■	■	■	■												■																												
CC-E I _{AC} /V	1SVR011770R0500	■						■	■														■																												
CC-E I _{AC} /I	1SVR011771R2200	■						■	■																																										
CC-E I _{AC} /I	1SVR011772R2300	■						■	■																																										
CC-E I _{DC} /V	1SVR011773R2400	■									■	■											■																												
CC-E I _{DC} /I	1SVR011774R2500	■									■	■																																							
CC-E I _{DC} /I	1SVR011775R2600	■									■	■																																							
CC-E/I	1SVR011708R0400		■					■	■	■	■												■																												
CC-E I _{AC} /V	1SVR011780R1100		■					■	■														■																												
CC-E I _{AC} /I	1SVR011781R0600		■					■	■																																										
CC-E I _{AC} /I	1SVR011782R0700		■					■	■																																										
CC-E I _{DC} /V	1SVR011783R0000		■								■	■											■																												
CC-E I _{DC} /I	1SVR011784R0100		■								■	■																																							
CC-E I _{DC} /I	1SVR011785R1100		■								■	■																																							
CC-E I _{AC} /ILPO	1SVR010203R0500							■	■											■																															
CC-U/I	1SVR040006R0100			■	■			■	■												■		■	■	■	■	■	■	■	■	■	■	■																		
CC-U/I	1SVR040007R0200		■			■		■	■												■		■	■	■	■	■	■	■	■	■	■	■																		
CC-U/V	1SVR040008R1300			■	■							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■																		
CC-U/V	1SVR040009R1400		■			■						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■																		

Serial Data Converters

ILPH

Rated supply voltage U _s		Type	Order number
24 V DC		ILPH RS 232-RS 485 / Ethernet	1SNA684252R0200
115 - 230 V AC			1SNA684231R2500
24 - 48 V DC		ILPH RS 232 / RS 422-485	1SNA684233R2700
24 - 42 V AC/DC			1SNA684 333R2300
10 - 34 V DC			1SNA684 334R2400
10 - 24 V AC		ILPH RS 232 / RS 232	1SNA684234R2000
110 - 240 V AC/DC		ILPH RS 422 - 485 / RS 422 - 485	1SNA684244R0200
		ILPH RS 232 / FO-S	1SNA684212R2200
			1SNA684236R2200
		ILPH RS 232 / FO-P	1SNA684237R2300
			1SNA684238R0400
		LPH RS 485 / FO-S	1SNA684239R0500
		ILPH RS 485 / FO-P	1SNA684246R0400
			1SNA684247R0500
			1SNA684248R1600
		ILPH BdC / RS 422 - 485	1SNA684249R1700
		ILPH RS 232 / BdC	1SNA684232R2600
			1SNA684202R0100
Input signal			
RS 232			
RS 422			
RS 485			
Current loop			
Output signal			
RS 232			
RS 422			
RS 485			
Current loop			
Fiber optic glass			
Fiber optic plastic			
Ethernet			
Galvanic isolation			
3 way isolation			
No isolation			

Application, Approvals and marks

Applications for analog signal processing and correct solution using CC-E and CC-U converters

Nearly every process includes a control system that receives data by means of analog signals and then evaluates the data and sets the respective parameters correspondingly.

When transmitting analog signals numerous problems may arise which can disturb or even block an ideal behavior of the process. Below we have listed some processing problems together with the respective solutions to solve these problems:

Signal conversion

Sometimes the available signals cannot be processed by the controller or the actuator. In this case, signal converters are required to convert the input signal (or different input signals) to the desired output signal.

Signal amplification

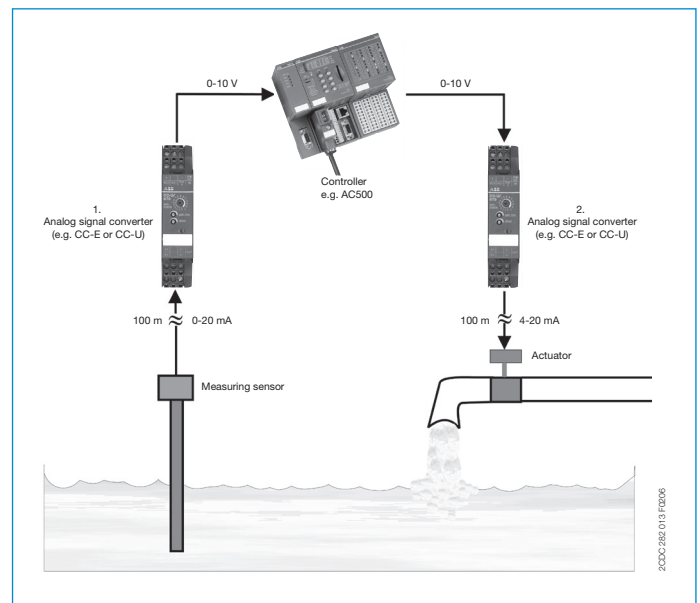
If long lines or high burdens have to be operated, it may be necessary to amplify the signal. CC analog signal converters require only low input power and provide high output power.

Thus, there are no restrictions for the converter's position on the line, i.e. it can be used

- for signal refreshing ① at the end of the line (low input power)
- or for signal amplification ② at the beginning of the line (high output power).

Signal filtering

Particularly on long lines or in rough industrial environments the signals are exposed to high electromagnetic interferences. The frequency of the coupled interference signals may be in the range of the common mains frequency (50 Hz) or even much higher (in case of frequency converters). According to the specific requirements, analog signal converters are available which provide reliable suppression of those interferences by means of an input low-pass filter.



Signal separation

Protection against overvoltage

The increased use of micro-electronics make controls much more sensitive against overvoltages, resulting from lightning discharges or switching processes. Suppression diodes are incorporated in the input of the CC analog signal converters which enable the converters to arrest overvoltages with low energy level (resulting from switching processes) by themselves. The products furthermore provide electrical isolation between input, output and supply circuit for protection of the controller connected to the output.

Protection against ground loops

If components are used which refer to ground, the measuring signals can be falsified by a so-called ground loop. In this case, certain parts of the signal are transmitted via earth and not via the analog transmission line, thus causing incorrect evaluation of the signal. The electrical isolation between the input and the output disconnects these ground loops and thus enables correct signal transmission.

		CC-E/STD	CC-E/I	CC-U/STD	CC-U/STD	CC-E/RTD	CC-U/RTD	CC-U/RTDR	CC-E/TC	CC-U/TC	CC-U/TCR	CC-E/I	CC-E I _{AC} /ILO	CC-U/I	CC-U/V	
Approvals																
	UL 508, CAN/CSA C22.2 No.14	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	UL 1604 (Class I, Div 2, hazardous locations), CAN/CSA C22.2 No.213	▲		■		▲	■		▲	■		▲		■	■	
	CB scheme				■			■			■					
	CCC				■			■			■					
Marks																
	CE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	C-Tick	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ existing
▲ existing for some devices
□ pending

CR-M Range

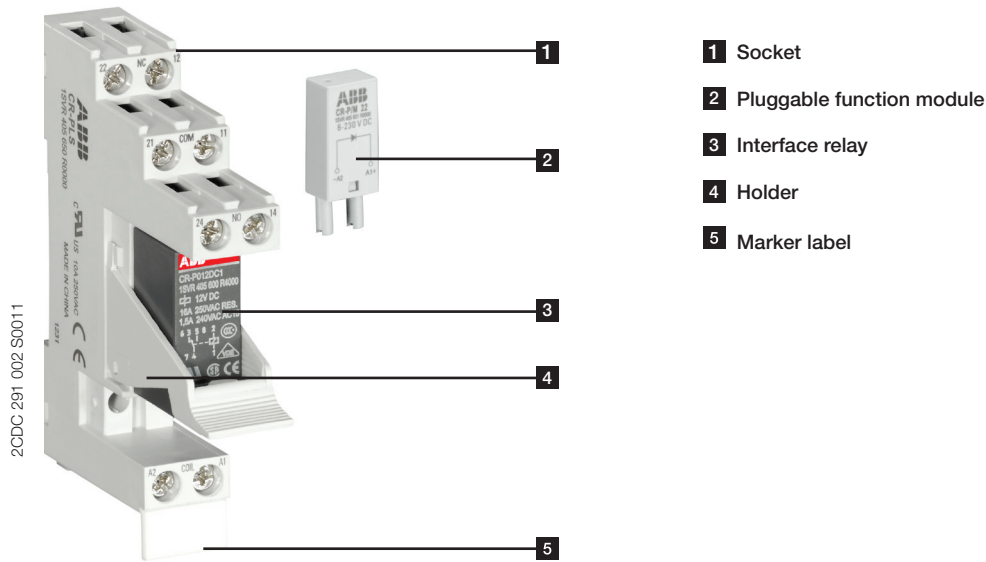
Accessories – Sockets CR-M

32 ABB | EPR Selection Tables 2014 | 2CDC110083C0201

Pluggable Interface Relays

CR-P Range

	Type	Order number
	CR-P012DC1	1SVR405600R4000
	CR-P024DC1	1SVR405600R1000
	CR-P048DC1	1SVR405600R6000
	CR-P110DC1	1SVR405600R8000
	CR-P024AC1	1SVR405600R0000
	CR-P048AC1	1SVR405600R5000
	CR-P110AC1	1SVR405600R7000
	CR-P120AC1	1SVR405600R2000
	CR-P230AC1	1SVR405600R3000
	CR-P012DC2	1SVR405601R4000
	CR-P024DC2	1SVR405601R1000
	CR-P048DC2	1SVR405601R6000
	CR-P110DC2	1SVR405601R8000
	CR-P024AC2	1SVR405601R0000
	CR-P048AC2	1SVR405601R5000
	CR-P110AC2	1SVR405601R7000
	CR-P120AC2	1SVR405601R2000
	CR-P230AC2	1SVR405601R3000
	CR-P024DC2G	1SVR405606R1000
	CR-P024AC2G	1SVR405606R0000
	CR-P110AC2G	1SVR405606R7000
	CR-P230AC2G	1SVR405606R3000
Input voltage		
12 V DC	■	
24 V DC	■	
48 V DC	■	
110 V DC	■	
24 V AC	■	
48 V AC	■	
110 V AC	■	
120 V AC	■	
230 V AC	■	
Output rating		
250 V 16 A	■	
250 V 8 A	■	
Output contacts		
c/o	1	1
Gold contact	2	2



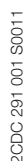
Accessories - Sockets CR-P

Type	Version	Connection terminals	Order code	Pack. unit pieces
Sockets				
CR-PLS	Logical socket with protective separation	screw	1SVR405650R0000	10
CR-PLSx	Logical socket	screw	1SVR405650R0100	10
CR-PLC	Logical socket	spring connection	1SVR405650R0200	10
CR-PSS	Standard socket	screw	1SVR405650R1000	10
Socket accessories				
CR-PH	Plastic Holder		1SVR405659R0000	10
CR-PJ	Jumper bar for sockets with screw connection		1SVR405658R5000	10
Markers				
CR-P	Marker		1SVR405658R0000	10

CR-U Range

Accessories - Sockets

36 ABB | EPR Selection Tables 2014 | 2CDC110083C0201



- #### 4 Holder

CR-P/M Range

	Type	Order number
	CR-P/M 22	1SVR405651R0000
	CR-P/M 42	1SVR405652R0000
	CR-P/M 42V	1SVR405652R1000
	CR-P/M 42B	1SVR405652R4000
	CR-P/M 42BV	1SVR405652R4100
	CR-P/M 42C	1SVR405652R9000
	CR-P/M 42CV	1SVR405652R9100
	CR-P/M 52B	1SVR405653R0000
	CR-P/M 52D	1SVR405653R4000
	CR-P/M 52C	1SVR405653R1000
	CR-P/M 62	1SVR405654R0000
	CR-P/M 62V	1SVR405654R1000
	CR-P/M 62E	1SVR405654R4000
	CR-P/M 62EV	1SVR405654R4100
	CR-P/M 92	1SVR405654R0100
	CR-P/M 92V	1SVR405654R1100
	CR-P/M 62C	1SVR405655R0000
	CR-P/M 62CV	1SVR405655R1000
	CR-P/M 62D	1SVR405655R4000
	CR-P/M 62DV	1SVR405655R4100
	CR-P/M 92C	1SVR405655R0100
	CR-P/M 92CV	1SVR405655R1100
	CR-P/M 72	1SVR405656R0000
	CR-P/M 72A	1SVR405656R1000
	CR-P/M 82	1SVR405656R2000
Rated control supply voltage		
6 - 220 V DC	■	
6 - 24 V DC	■	■
24 - 60 V DC		■
110 V DC		■
110 - 230 V DC		■
6 - 24 V AC		■
24 - 60 V AC		■
110 - 230 V AC		■
24 V AC		■
115 V AC		■
230 V AC		■
24 - 240 V AC/DC		■
Function		
Diode - reverse polarity protection / free wheeling diode	■	
Diode and LED - reverse polarity protection / free wheeling diode	■	■
RC element - spark quenching		■
Diode and LED		■
Varistor and LED - overvoltage protection		■
Diode and LED - overvoltage protection		■
Varistor - overvoltage protection		■
Multifunctional time module		■
LED red	■	■
LED green	■	■

Accessories for PCB relays CR-P

Type Sockets	Version	Connection	Order number
CR-PLS	Logical socket with safety Isolation	screw	1SVR405650R0000
CR-PLSx	Logical socket	screw	1SVR405650R0100
CR-PLC	Logical socket	spring	1SVR405650R0200
CR-PSS	Standard socket	screw	1SVR405650R1000

Socket accessories

CR-PH	Plastic holder	1SVR405659R0000
CR-PJ	Jumper bar for sockets with screw connection	1SVR405658R5000

Accessories for miniature relays CR-M

Type Sockets	Version
CR-M2LS	Logical socket for 2 c/o contacts
CR-M3LS	Logical socket for 3 c/o contacts
CR-M4LS	Logical socket for 2/4 c/o contacts
CR-M2LC	Logical socket for 2 c/o contacts
CR-M4LC	Logical socket for 2/4 c/o contacts
CR-M2SS	Standard socket for 2 c/o contacts
CR-M3SS	Standard socket for 3 c/o contacts
CR-M4SS	Standard socket for 2/4 c/o contacts
CR-M2SF	Standard socket for 2 c/o contacts
CR-M4SF	Standard socket for 2/4 c/o contacts

Socket accessories

CR-MH	Plastic holder
CR-MH1	Metal holder
CR-MJ	Jumper bar for sockets with screw connection

CR-U Range

[illegible]

Accessories for universal relays CR-U

Connection	Order number
screw	1SVR405651R1100
screw	1SVR405651R2100
screw	1SVR405651R3100
spring	1SVR405651R1200
spring	1SVR405651R3200
screw	1SVR405651R1000
screw	1SVR405651R2000
screw	1SVR405651R3000
fork type screw	1SVR405651R1300
fork type screw	1SVR405651R3300

	1SVR405659R1000
	1SVR405659R1100
	1SVR405658R6000

Type	Sockets	Version	Order Number
CR-U2S	for 2 c/o contacts + module		1SVR405670R0000
CR-U3S	for 3 c/o contacts + module		1SVR405660R0000
CR-U3E	for 3 c/o contacts		1SVR405660R0100
CR-U2SM	for 2 c/o contacts (small version)		1SVR405670R1100
CR-U3SM	for 3 c/o contacts (small version)		1SVR405660R1100

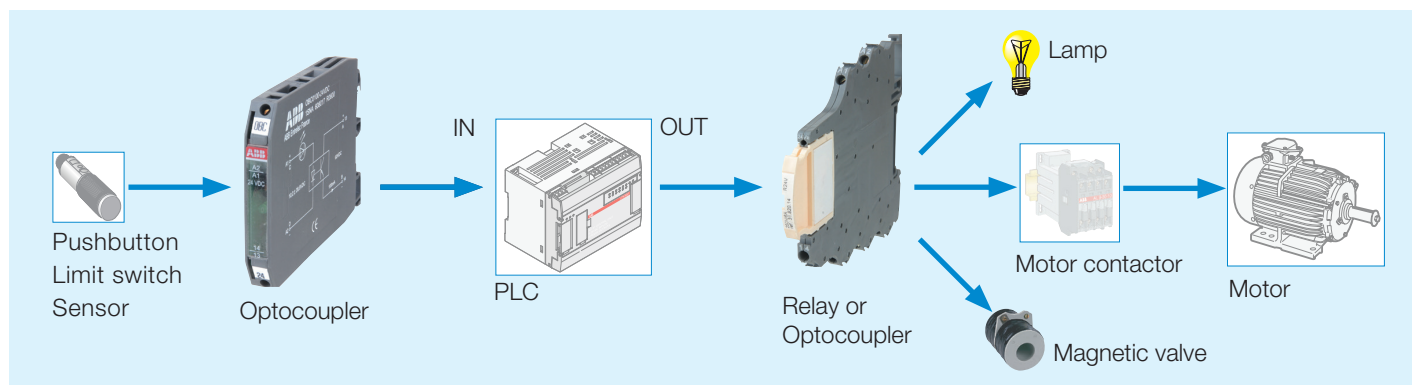
Socket assessories

CR-UH Metal holder	1SVR405669R0000
--------------------	-----------------

Interface Relays and Optocouplers

R600 Relays

	Type		Order number	
Input voltage				
5 V DC	RB 121-5VDC	■	1SNA645034R2300	
12 V DC	RB 121-5VDC	■	1SNA645036R2500	
24 V DC	RBR 121-5VDC	■	1SNA645534R2500	
48 - 60 V DC	RBR 121-5VDC	■	1SNA645536R2700	
110 - 115 V DC	RB 121-12VDC	■	1SNA645069R0000	
230 V DC	RB 121-12VDC	■	1SNA645037R2600	
60 - 230 V DC	RBR 121-12VDC	■	1SNA645569R0000	
24 V AC	RBR 121-12VDC	■	1SNA645537R2000	
48 - 60 V AC	RB 101AR-24VAC/DC	■	1SNA645019R0400	
115 V AC	RBR 101AR-24VAC/DC	■	1SNA645519R0600	
230 V AC	RB 111A-24VAC/DC	■	1SNA645014R2700	
60 - 230 V AC	RB 111AI-24VAC/DC	■	1SNA645063R0000	
	RB 111AR-24VAC/DC	■	1SNA645018R0300	
	RBR 111A-24VAC/DC	■	1SNA645514R2100	
	RBR 111AI-24VAC/DC	■	1SNA645563R0200	
	RBR 111AR-24VAC/DC	■	1SNA645518R0500	
	RB 121-24VDC	■	1SNA645064R0100	
	RB 121-24VDC	■	1SNA645065R0200	
	RB 121A-24VAC/DC	■	1SNA645001R0300	
	RB 121A-24VAC/DC	■	1SNA645005R0700	
	RB 121AI-24VAC/DC	■	1SNA645032R2100	
	RB 121AI-24VAC/DC	■	1SNA645009R1300	
	RB 121AI-24VAC/DC	■	1SNA645033R2200	
	RB 121AI-24VAC/DC	■	1SNA645010R0700	
	RBR 121-24VDC	■	1SNA645564R0300	
	RBR 121-24VDC	■	1SNA645565R0400	
	RBR 121A-24VAC/DC	■	1SNA645501R0500	
	RBR 121A-24VAC/DC	■	1SNA645505R0100	
	RBR 121AI-24VAC/DC	■	1SNA645532R2300	
	RBR 121AI-24VAC/DC	■	1SNA645509R1500	
	RBR 121AI-24VAC/DC	■	1SNA645533R2400	
	RBR 121AI-24VAC/DC	■	1SNA645510R0100	
	RB 122A-24VAC/DC	■	1SNA645012R2500	
	RBR 122A-24VAC/DC	■	1SNA645512R2700	
Output rating				
10 mA - 6 A	■	■	■	■
1 mA - 6 A	■	■	■	■
1 mA - 8 A	■	■	■	■
Output contacts				
c/o	1	1	1	1
n/o				
n/c				
Terminal type				
Screw	■	■	■	■
Spring	■	■	■	■



Interface Relays and Optocouplers

R500 Relays

	Type	Order number
	D 2,5/5-R121-24VDC	1SNA645047R0000
	D 2,5/5-R121L-24VDC	1SNA645547R0200
	D 2,5/5-R121AL-24VAC/DC	1SNA645021R2600
	D 2,5/5-R121AL-48VAC/DC	1SNA645521R2000
	D 2,5/5-R121BL-110VAC	1SNA645049R1200
	D 2,5/5-R121BL-230VAC	1SNA645549R1400
Input voltage		
24 V DC	■ ■ ■	
48 V DC		■
24 V AC		■
48 V AC		■
110 V AC		■
230 V AC		■
Output rating		
10 mA - 6 A	■ ■ ■ ■ ■ ■	
Output contacts		
c/o	1 1 1 1 1 1	
Type		
with LED		■ ■ ■ ■ ■
without LED	■	

Accessories for R500 relays and optocouplers

End stop type	Order code	Packing
BAMH	1SNA114836R0000	50
BAMH V0	1SNA194836R0100	50
BADH	1SNA116900R2700	50

Jumper bar 10 poles	Order code	Packing
PCMS V0	1SNA205523R2700	8

Test device	Order code	Packing
DCB (*only on top decks)	1SNA105028R2100	10

Test plug	Order code	Packing
FC2	1SNA007865R2600	10

Marking method	Order code	Packing
RC55 Blank cards	1SNA230000R1200	

*different markings available on the main catalogue

Input Opto base	Order code	Packing
D 2,5/5-MP1	1SNA607223R0000	10

Relay / Opto bases	Order code	Packing
D 2,5/5-MP	1SNA607224R0100	10
D 2,5/5-MP-24VDC (with LED 24 V DC)	1SNA607222R0700	10
D 2,5/5-MP-24VAC/DC (with LED 24 V AC/DC)	1SNA607260R2100	10
D 2,5/5-MP-48VAC/DC (with LED 48 V AC/DC)	1SNA607261R1600	10
D 2,5/5-MP-110VAC (with LED 110 V AC)	1SNA607266R1300	10
D 2,5/5-MP-230VAC (with LED 230 V AC)	1SNA607267R1400	10

Relay plugs	Order code	Packing
BNMS R24V-1 (24 V 1 SPDT 10 mA to 6 A)	1SNA031820R1400	4
BNMS R24V-2 (24 V 1 SPDT 1 mA to 6 A)	1SNA031847R1300	4

Input Opto plugs	Order code	Packing
BNMS T5V-1 (for OBIC 5 V DC)	1SNA031831R0300	4
BNMS T24V-1 (for OBIC 24 V DC)	1SNA031800R2100	4
BNMS T48V-1 (for OBIC 48 V DC)	1SNA03 801R1600	4
BNMS T125V-1 (for OBIC 125 V DC)	1SNA031845R1100	4
BNMS T24V-1 (for OBIC 24 V AC)	1SNA031802R1700	4
BNMS T48V-1 (for OBIC 48 V AC)	1SNA031803R1000	4
BNMS T115V-1 (for OBIC 115 V AC)	1SNA031804R1100	4
BNMS T230V-1 (for OBIC 230 V AC)	1SNA031805R1200	4

Input Opto plugs	Order code	Packing
BNMS P5V-3 (for OBOC 5 V DC)	1SNA031809R2600	4
BNMS P24V-3 (for OBOC 24 V DC)	1SNA031810R1200	4
BNMS P48V-3 (for OBOC 48 V DC)	1SNA031811R0700	4
BNMS P5V-1 5 V/2 A ¹⁾	1SNA031814R0200	4
BNMS P24V-1 24 V/2 A ²⁾	1SNA031815R0300	4
BNMS A24V-4 250 V/1 A	1SNA031839R1300	4

¹⁾ For D 2,5/5-OBOC-2000 5 V DC only

²⁾ For all D 2,5/5-OBOC-2000 except 5 V DC model

Interface Relays and Optocouplers

R500 Optocouplers

Type	Order number
D 2.5/5-OBIC-0030-5VDC	1SNA607274R1300
D 2.5/5-OBIC-0030-24VDC	1SNA607210R1700
D 2.5/5-OBIC-0030-48VDC	1SNA607211R0400
D 2.5/5-OBIC-0030-125VDC	1SNA607275R1400
D 2.5/5-OBIA-0030-24VAC	1SNA607212R0500
D 2.5/5-OBIA-0030-48VAC	1SNA607213R0600
D 2.5/5-OBIA-0030-115VAC	1SNA607214R0700
D 2.5/5-OBIA-0030-230VAC	1SNA607215R0000
D 2.5/5-OBIC-0100-5VDC	1SNA607203R1500
D 2.5/5-OBIC-0100-24VDC	1SNA607204R1600
D 2.5/5-OBIC-0100-48VDC	1SNA607205R1700
D 2.5/5-OBIC-1000-5VDC	1SNA607206R1000
D 2.5/5-OBIC-1000-24VDC	1SNA607207R1100
D 2.5/5-OBIC-1000-24VAC/DC	1SNA607250R2700
D 2.5/5-OBIC-1000-48VAC/DC	1SNA607251R1400
D 2.5/5-OBIC-1000-110VAC	1SNA607270R2300
D 2.5/5-OBIC-1000-230VAC	1SNA607271R1000
D 2.5/5-OBIC-2000-5VDC	1SNA607208R2200
D 2.5/5-OBIC-2000-24VDC	1SNA607209R2300
D 2.5/5-OBIC-2000-24VAC/DC	1SNA607255R1000
D 2.5/5-OBIC-2000-48VAC/DC	1SNA607256R1100
D 2.5/5-OBIC-2000-110VAC	1SNA607272R1100
D 2.5/5-OBIC-2000-230VAC	1SNA607273R1200
D 2.5/5-OBIA-1000-24VDC	1SNA607238R1700
D 2.5/5-OBIA-1000-24VAC/DC	1SNA607240R2500
D 2.5/5-OBIA-1000-48VAC/DC	1SNA607241R1200
D 2.5/5-OBIA-1000-110VAC	1SNA607268R2500
D 2.5/5-OBIA-1000-230VAC	1SNA607269R2600
Input voltage	
5 V DC	■
24 V DC	■
48 V DC	■
125 V DC	■
48 V AC	■
110 V AC	■
115 V AC	■
230 V AC	■
Output rating	
30 mA	■
100 mA	■
2 A	■
1 A	■
Output voltage	
30 V DC	■
58 V DC	■
253 V AC	■
Type	
input optocoupler	■
output optocoupler	■

Interface Relays and Optocouplers

R600 Optocouplers

	Type	Order number
	OBIC 0100 5-12VDC	1SNA645047R0000
	OBRIC 0100 5-12VDC	1SNA645547R0200
	OBIC 0100 24VDC	1SNA645021R2600
	OBRIC 0100 24VDC	1SNA645521R2000
	OBIC 0100 48-60VAC/DC	1SNA645049R1200
	OBRIC 0100 48-60VAC/DC	1SNA645549R1400
	OBIC 0100 115-230VAC/DC	1SNA645022R2700
	OBRIC 0100 115-230VAC/DC	1SNA645522R2100
	OBIC 1000 5-12VDC	1SNA645050R1700
	OBROC 1000 5-12VDC	1SNA645550R1100
	OBIC 1000 24VDC	1SNA645051R0400
	OBIC 1500 24VAC/DC	1SNA645025R2200
	OBIC 5000 24VDC	1SNA645024R2100
	OBROC 1000 24VDC	1SNA645551R0600
	OBROC 1500 24VAC/DC	1SNA645525R2400
	OBROC 5000 24VDC	1SNA645524R2300
	OBIC 1000 48-60VAC/DC	1SNA645053R0600
	OBROC 1000 48-60VAC/DC	1SNA645553R0000
	OBIC 1000 115VAC/DC	1SNA645054R0700
	OBIC 5000 115VAC/DC	1SNA645058R1300
	OBROC 1000 115VAC/DC	1SNA645554R0100
	OBROC 5000 115VAC/DC	1SNA645555R1500
	OBIC 1000 230VAC/DC	1SNA645026R2300
	OBIC 5000 230VAC/DC	1SNA645059R1400
	OBROC 1000 230VAC/DC	1SNA645526R2500
	OBROC 5000 230VAC/DC	1SNA645555R1600
	OBOA 1000 24VDC	1SNA645027R2400
	OBOA 2000 24VDC	1SNA645029R0600
	OBOA 1000 24VDC	1SNA645527R2600
	OBOA 2000 24VDC	1SNA645529R0000
Input voltage		
5 - 12 V DC	■	
24 V DC	■	
48 - 60 V DC		■
115 - 230 V DC		■
115 V DC		■
230 V DC		■
24 V AC		■
48 - 60 V AC		■
115-230 V AC		■
115 V AC		■
230 V AC		■
Output rating		
100 mA	■	■
2 A		■
5 A		■
1 A		■
Output voltage		
58 V DC	■	■
400 V AC		■
Terminal type		
Screw	■	■
Spring	■	■

	■		■		■
		■		■	■

Type	Description	Order number	Pack.
BADH V0	End Section	1SNA116900R2700	50
BADL V0	End Section	1SNA399903R0200	50
BAM2 V0	End Section	1SNA399967R0100	50
SC 612	Separator end section	1SNA290474R0200	10
BJ 612-10	Divisible shunt 10 poles	1SNA290488R0100	10
BJ 612-70	Divisible shunt 70 poles	1SNA290489R0200	10
D4/12-3-3	Screw clamp distribution block sp. 12 mm	1SNA645031R2000	5
D4/12-3R-3R	Screw clamp distribution block sp. 12 mm	1SNA645531R2200	5
FC2	Test plug DIA. 2 mm	1SNA007865R2600	10

Logic Relays

CL Range

Stand Alone

Expandable

Expansions

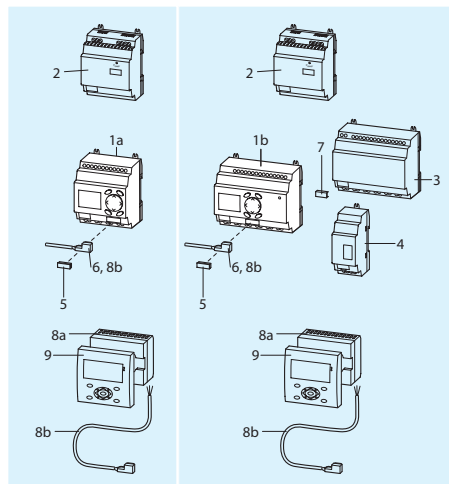
	Type	Order number															
	CL-LSR.C12AC1	1SVR440712R0300															
	CL-LSR.CX12AC1	1SVR440712R0200															
	CL-LSR.12AC2	1SVR440713R0100															
	CL-LSR.C12AC2	1SVR440713R0300															
	CL-LSR.CX12AC2	1SVR440713R0200															
	CL-LSR.C12DC1	1SVR440710R0300															
	CL-LSR.CX12DC1	1SVR440710R0200															
	CL-LSR.12DC2	1SVR440711R0100															
	CL-LSR.C12DC2	1SVR440711R0300															
	CL-LSR.CX12DC2	1SVR440711R0200															
	CL-LST.C12DC2	1SVR440711R1300															
	CL-LST.CX12DC2	1SVR440711R1200															
	CL-LMR.C18AC1	1SVR440722R0300															
	CL-LMR.CX18AC1	1SVR440722R0200															
	CL-LMR.C18AC2	1SVR440723R0300															
	CL-LMR.CX18AC2	1SVR440723R0200															
	CL-LMR.C18DC1	1SVR440720R0300															
	CL-LMR.CX18DC1	1SVR440720R0200															
	CL-LMR.C18DC2	1SVR440721R0300															
	CL-LMR.CX18DC2	1SVR440721R0200															
	CL-LMT.C20DC2	1SVR440721R1300															
	CL-LMT.CX20DC2	1SVR440721R1200															
	CL-LER.20	1SVR440709R5000															
	CL-LER.18AC2	1SVR440723R0000															
	CL-LER.18DC2	1SVR440721R0000															
	CL-LET.20DC2	1SVR440721R1000															
	CL-LEC.C1000	1SVR440709R0000															
Digital inputs	8	8	8	8	8	8	8	8	8	8	12	12	12	12	12	12	12
Usable as Analogue inputs	2	2				2	2	2	2	2	4	4			4	4	2
Relay outputs	4	4	4	4	4	4	4	4	4		6	6	6	6	6	6	
Transistor outputs										4							
Display and keypad	■		■	■		■	■	■		■	■		■		■		
Realtime clock	■	■		■	■	■		■	■	■	■	■	■	■	■	■	■
Expandable											1	1	1	1	1	1	1

Rated supply voltage U_s

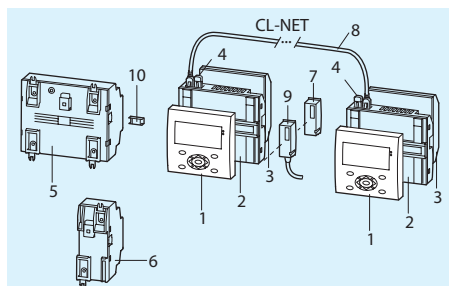
12 V DC						■	■							■	■		
24 V DC							■	■	■	■	■				■	■	■
24 V AC	■	■									■	■					
110 - 240 V AC			■	■	■											■	

Stand alone

Expandable



Display system Compact HMI logic relay



- 1a Logic relay CL-LS..
- 1b Expandable logic relay CL-LM..
- 2 Power supply CP-D...
- 3 I/O expansion CL-LER.., CL-LET.. for logic relays CL-LM..
- 4 Coupler unit CL-LEC.. for remote expansion of logic relays CL-LM..
- 5 Memory module CL-LAS.MD003 for logic relays CL-LS.., CL-LM..
- 6 Connecting cable CL-LAS.TK001, CL-LAS.TK002 to connect PC
- 7 CL-LINK plug CL-LAS.TK011 to connect expansion to logic relays CL-LM..
- 8a Remote display connection module CL-LDC.S..
- 8b Connecting cable CL-LAD.TK007 to connect a remote displays to a logic relay
- 9 Display module CL-LDD..
- 1 Display module CL-LDD..
- 2 Display base module CL-LDC.LN..
- 3 Display I/O module CL-LDR.., CL-LDT..
- 4 Termination resistor CL-LAD.TK009
- 5 I/O expansion CL-LER.., CL-LET..
- 6 Coupler unit CL-LEC.. for remote expansion
- 7 Memory module CL-LAD.MD004 for display base module
- 8 Connecting cable CL-LAD.TK002, CL-LAD.TK003, CL-LAD.TK004
- 9 Connecting cable CL-LAD.TK001, CL-LAD.TK011 to connect PC
- 10 CL-LINK plug CL-LAS.TK011 for expansion of logic relays CL-LM.. e.g. door of switchgear cabinet

Display Systems

	Type	Order number				
	CL-LDR.16AC2	1SVR440853R0000				
	CL-LDR.16DC2	1SVR440851R0000				
	CL-LDR.17DC2	1SVR440851R2000				
	CL-LDT.16DC2	1SVR440851R1000				
	CL-LDT.17DC2	1SVR440851R3000				
Digital inputs	12	12	12	12	12	
Analogue inputs		4	4	4	4	
Analog outputs			1		1	
Relay outputs	4	4	4			
Transistor outputs				4	4	

Rated supply voltage U_s

24 V DC		■	■	■	■
110 - 240 V AC	■				

Accessories CL range

Type	For logic relay	For display system	Description	Order code
Display modules				
CL-LDD.XK	■	■	Graphic display, 132 x 64 pixels	1SVR440839R4500
CL-LDD.K	■	■	Graphic display, 132 x 64 pixels, with keypad	1SVR440839R4400
Remote display connection modules				
CL-LDC.SDC2	■	■	Module to displace display from the logic relay, 5 m, length adjustable, 24 V DC	1SVR440841R0000
CL-LDC.SAC2	■	■	Module to displace display from the logic relay, 5 m, length adjustable, 100-240 V AC	1SVR440843R0000
Display base modules				
CL-LDC.LDC2	-	■	CPU / power supply, 24 V DC	1SVR440821R0000
CL-LDC.LAC2	-	■	CPU / power supply, 100-240 V AC	1SVR440823R0000
CL-LDC.LNDC2	-	■	CPU / power supply, networking-compatible (CL-NET), 24 V DC	1SVR440821R1000
CL-LDC.LNAC2	-	■	CPU / power supply, networking-compatible (CL-NET), 100-240 V AC	1SVR440823R1000
Accessories for logic relays and display system				
CL-LAS.PS002	■	■	Software for programming and control of CL range devices	1SVR440799R8000
CL-LAS.MD003	■	-	Memory module for logic relays (32 kB)	1SVR440799R7000
CL-LAD.MD004	-	■	Memory module for display base modules (256 kB)	1SVR440899R7000
CL-LAS.TK001	■	-	Cable with serial interface to connect PC and logic relay (length 2m)	1SVR440799R6000
CL-LAD.TK001	-	■	Cable with serial interface to connect PC and display base module (length 2 m)	1SVR440899R6000
CL-LAS.TK002	■	-	Cable with USB interface to connect PC and logic relay	1SVR440799R6100
CL-LAD.TK011	-	■	Cable with USB interface to connect PC and display base module	1SVR440899R6700
CL-LAD.TK002	-	■	Network cable (CL-NET) to connect 2 display base modules (length 0.3 m)	1SVR440899R6100
CL-LAD.TK003	-	■	Network cable (CL-NET) to connect 2 display base modules (length 0.8 m)	1SVR440899R6200
CL-LAD.TK004	-	■	Network cable (CL-NET) to connect 2 display base modules (length 1.5 m)	1SVR440899R6300
CL-LAD.TK007	■	-	Cable for point-to-point connection of remote-display connection module and logic relay, length adaptable (length 2 m)	1SVR440899R6600
CL-LAD.TK005	-	■	Cable for point-to-point connection of remote display connection modules and display base module, length adaptable (length 5 m)	1SVR440899R6400
CL-LAD.TK006	-	■	Cable for point-to-point connection of 2 display base modules, length adaptable (length 5 m)	1SVR440899R6500
CL-LAS.TK011	■	■	Spare plug (CL-LINK) for connection of logic relay to expansion	1SVR440799R5100
CL-LAD.TK009	-	■	Termination resistor (2 pieces)	1SVR440899R6900
CL-LAS.FD001	■	-	Fixing brackets for screw mounting of logic relay, expansion, display base module (9 pieces)	1SVR440799R5000
CL-LAD.FD002	-	■	Tool for mounting of display modules	1SVR440899R3000
CL-LAS.TD001	■	-	Input-/ output simulator with wall power supply, fits to CL-LSR and CL-LST Rated input voltage 100-240 V AC, rated output voltage 24 V DC	1SVR440793R0000
CL-LAD.FD001	-	■	Protective cover, transparent, for harsh environmental conditions and application in the food industry	1SVR440899R1000
CL-LAD.FD011	-	■	Protective cover, transparent and sealable	1SVR440899R2000
Power supplies				
CL-D 24/0.42	■	-	24 V DC / 0.42 A; Input 100 - 240 V AC	1SVR427041R0000
CL-D 24/1.3	■	-	24 V DC / 1.3 A; Input 100 - 240 V AC	1SVR427043R0100

Contact us

ABB STOTZ-KONTAKT GmbH

<http://www.abb.com/lowvoltage>

-> Control Products -> Electronic Relays and Controls

www.abb.com/contacts

Order Number 2CDC 110 083 C0201 Revision B Printed in Germany (01/2014-ZVD)

Power and productivity
for a better world™

