

# 2

## INDUSTRIAL CONTROL



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## Mini Contactors - B6 and B7 Series

### Single Contactors

Ratings			Coil	No. Of Main Poles	Aux Contacts		Part No.	Insert Coil Voltage
AC1 Amps	AC3 Amps	@ 415V kW			NO	NC		
20	8.5	4	AC	3	1	-	B6-30-10	<input type="checkbox"/>
					-	1	B6-30-01	<input type="checkbox"/>
			DC	3	1	-	BC6-30-10	<input type="checkbox"/>
					-	1	BC6-30-01	<input type="checkbox"/>
			AC	4	-	-	B6-40-00	<input type="checkbox"/>
					-	-	BC6-40-00	<input type="checkbox"/>
	11.5	5.5	AC	3	1	-	B7-30-10	<input type="checkbox"/>
					-	1	B7-30-01	<input type="checkbox"/>
			DC	3	1	-	BC7-30-10	<input type="checkbox"/>
					-	1	BC7-30-01	<input type="checkbox"/>
			AC	4	-	-	B7-40-00	<input type="checkbox"/>
					-	-	BC7-40-00	<input type="checkbox"/>



### Accessories

#### Auxiliary Contact Blocks

For	Position	Aux Contacts		Part No.
		NO	NC	
B6.30.10/B7.30.10	Side	1	1	CA6-11M
B6.30.01/B7.30.01	Side	1	1	CA6-11N
B6.40.00/B7.40.00	Side	1	1	CA6-11E
B6.30.10/B7.30.10	Top	2	-	CAF6-20M
		-	2	CAF6-02M
		1	1	CAF6-11N
B6.30.01/B7.30.01	Top	2	-	CAF6-20N
		-	2	CAF6-02N
		1	1	CAF6-11E
B6.40.00/B7.40.00	Top	2	-	CAF6-20E
		-	2	CAF6-02E



### Thermal Overload Relays

#### T16 Series

For	Setting Range A	Part No.
B6 and B7 Mini Contactors	0.10 - 0.13	T16-0.13
	0.13 - 0.17	T16-0.17
	0.17 - 0.23	T16-0.23
	0.23 - 0.31	T16-0.31
	0.31 - 0.41	T16-0.41
	0.41 - 0.55	T16-0.55
	0.55 - 0.74	T16-0.74
	0.74 - 1.0	T16-1.0
	1.0 - 1.3	T16-1.3
	1.3 - 1.7	T16-1.7
	1.7 - 2.3	T16-2.3
	2.3 - 3.1	T16-3.1
	3.1 - 4.2	T16-4.2
	4.2 - 5.7	T16-5.7
	5.7 - 7.6	T16-7.6
	7.6 - 10.0	T16-10.0
10.0 - 13.0	T16-13.0	



Part No. Completion  
When ordering complete the Part No. by adding the following:-

Coil Voltage	50Hz	DC
24V	024V	024V
48V	048V	048V
110 - 127V	110V	110V
220 - 240V	240V	240V
380 - 415V	415V	



Unique AC/DC control voltage supply mode will accept AC or DC coil control voltage



## Contactors - AF Series

3 Pole						
AC1 Amps	Ratings			Aux Contacts		Part No.
	AC3 Amps	@ 415V kW		NO	NC	
25	9	4		1	-	24-60V 50/60HZ 20-60V DC AF09-30-10-11
						48-130V 50/60HZ-DC AF09-30-10-12
						100-250V50/60HZ-DC AF09-30-10-13
						250-500V50/60HZ-DC AF09-30-10-14
						12-20V DC AF09Z-30-10-20
						24-60V 50/60HZ 20-60V DC AF09Z-30-10-21
						24-60V 50/60HZ 20-60V DC AF09-30-01-11
						48-130V 50/60HZ-DC AF09-30-01-12
						100-250V 50/60HZ-DC AF09-30-01-13
						250-500V 50/60HZ-DC AF09-30-01-14
						12-20V DC AF09Z-30-01-20
						20-60V DC 24-60V 50/60HZ AF09Z-30-01-21
27	12	5.5		1	-	24-60V 50/60HZ 20-60V DC AF09-30-00-11
						48-130V 50/60HZ-DC AF09-22-00-12
						100-250V 50/60HZ-DC AF09-22-00-13
						250-500V 50/60HZ-DC AF09-22-00-14
						24-60V 50/60HZ 20-60V DC AF09Z-22-00-21
						24-60V 50/60HZ 20-60V DC AF09-40-00-11
						48-130V 50/60HZ-DC AF09-40-00-12
						100-250V 50/60HZ-DC AF09-40-00-13
						250-500V 50/60HZ-DC AF09-40-00-14
						12-20V DC AF09Z-40-00-20
						24-60V 50/60HZ 20-60V DC AF09Z-40-00-21
						24-60V 50/60HZ 20-60V DC AF12-30-10-11
30	17	7.5		1	-	48-130V 50/60HZ-DC AF12-30-10-12
						100-250V 50/60HZ-DC AF12-30-10-13
						250-500V 50/60HZ-DC AF12-30-10-14
						12-20V DC AF12Z-30-10-20
						24-60V 50/60HZ 20-60V DC AF12Z-30-10-21
						24-60V 50/60HZ 20-60V DC AF12-30-01-11
						48-130V 50/60HZ-DC AF12-30-01-12
						100-250V 50/60HZ-DC AF12-30-01-13
						250-500V 50/60HZ-DC AF12-30-01-14
						12-20V DC AF12Z-30-01-20
						24-60V 50/60HZ 20-60V DC AF12Z-30-01-21
						24-60V 50/60HZ 20-60V DC AF16-30-10-11
30	17	7.5		1	-	48-130V 50/60HZ-DC AF16-30-10-12
						100-250V 50/60HZ-DC AF16-30-10-13
						250-500V 50/60HZ-DC AF16-30-10-14
						12-20V DC AF16Z-30-10-20
						24-60V 50/60HZ 20-60V DC AF16Z-30-10-21
						24-60V 50/60HZ 20-60V DC AF16-30-01-11
						48-130V 50/60HZ-DC AF16-30-01-12
						100-250V 50/60HZ-DC AF16-30-01-13
						250-500V 50/60HZ-DC AF16-30-01-14
						12-20V DC AF16Z-30-01-20
						24-60V 50/60HZ 20-60V DC AF16Z-30-01-21
						24-60V 50/60HZ 20-60V DC AF16-22-00-11
45	26	11		-	-	48-130V 50/60HZ-DC AF16-22-00-12
						100-250V 50/60HZ-DC AF16-22-00-13
						250-500V 50/60HZ-DC AF16-22-00-14
						12-20V DC AF16Z-22-00-20
						24-60V 50/60HZ 20-60V DC AF16Z-22-00-21
						24-60V 50/60HZ 20-60V DC AF16-40-00-11
						48-130V50/60HZ-DC AF16-40-00-12
						100-250V 50/60HZ-DC AF16-40-00-13
						250-500V 50/60HZ-DC AF16-40-00-14
						12-20V DC AF16Z-40-00-20
						24-60V 50/60HZ 20-60V DC AF16Z-40-00-21
						24-60V 50/60HZ 20-60V DC AF26-30-00-11
55	32	15		-	-	48-130V 50/60HZ-DC AF26-30-00-12
						100-250V 50/60HZ-DC AF26-30-00-13
						250-500V 50/60HZ-DC AF26-30-00-14
						12-20V DC AF26Z-30-00-20
						24-60V 50/60HZ 20-60V DC AF26Z-30-00-21
						24-60V 50/60HZ 20-60V DC AF30-30-00-11
						48-130V50/60HZ-DC AF30-30-00-12
						100-250V 50/60HZ-DC AF30-30-00-13
						250-500V 50/60HZ-DC AF30-30-00-14
						12-20V DC AF30Z-30-00-20
						24-60V 50/60HZ 20-60V DC AF30Z-30-00-21
						24-60V 50/60HZ 20-60V DC AF38-30-00-11
60	35	18.5		-	-	48-130V 50/60HZ-DC AF38-30-00-12
						100-250V 50/60HZ-DC AF38-30-00-13
						250-500V 50/60HZ-DC AF38-30-00-14
						12-20V DC AF38Z-30-00-20
						24-60V 50/60HZ 20-60V DC AF38Z-30-00-21

Part No's with 'z' in number have low consumption coils

## AF09...AF38Z Accessories

For	Position	Aux Contacts		Part No.
		NO	NC	
AF09...AF38	Front	1	-	CA4-10
		-	1	CA4-01
	Front (No leading & NC lagging)	1	-	CA4-10
		0	1	CA4-01
AF09...AF16-30-10	Side	1	1	CAL4-11
		2	2	CA4-22M
	Front	3	1	CA4-31M
		1	3	CA4-13M
		0	4	CA4-04M
AF26...AF38-30-00	Front	2	2	CA4-22E
		3	1	CA4-31E
		4	0	CA4-40E
		0	4	CA4-04E

Auxiliary Contact Blocks (with A1/A2 Terminal Blocks)				
For	Position	Aux Contacts		Part No.
		NO	NC	
AF09...AF16-30-10	Front	1	1	CAT4-11E
AF26...AF38-30-00	Front	1	1	CAT4-11M

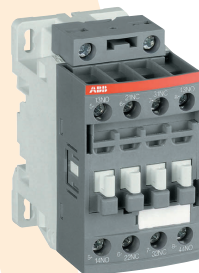
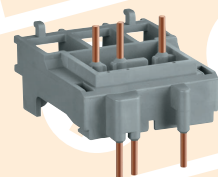
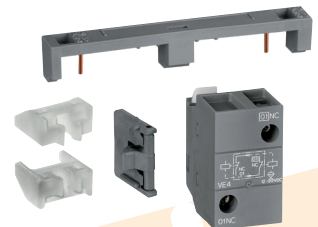
Interlocks	
Type	Part No.
Mechanical & electrical interlock unit	VEM4
Mechanical interlock unit	VM4

Connecting Links	
Type	Part No.
Connecting link	BEA16-4
	BEA38-4
Connection kit for PSR24-30 and MS132	PSR30-MS132
Connection set for reversing starter	BER16-4
	BER38-4
Connection set for Star-Delta starter	BEY16-4
	BEY38-4

## Contactors Relays - NF Series

Contactor Relays			
NO	Aux Contacts		Part No.
	NC	Range	
2	2	24-60V 50/60HZ 20-60V DC	NF22E-11
		48-130V 50/60HZ-DC	NF22E-12
		100-250V 50/60HZ-DC	NF22E-13
3	1	24-60V 50/60HZ 20-60V DC	NF22E-21
		24-60V 50/60HZ 20-60V DC	NF31E-11
		48-130V 50/60HZ-DC	NF31E-12
		100-250V 50/60HZ-DC	NF31E-13
4	-	24-60V 50/60HZ 20-60V DC	NF31E-21
		24-60V 50/60HZ 20-60V DC	NF40E-11
		48-130V 50/60HZ-DC	NF40E-12
		100-250V 50/60HZ-DC	NF40E-13
		24-60V 50/60HZ 20-60V DC	NFZ40E-21

Part No's with 'z' in number have low consumption coils







## Electronic Overload Relays - EF Series

For	Setting Range A	Part No.
AF09...AF38Z	0.10...0.32	EF19-0.32
	0.30...1.00	EF19-1.0
	0.80...2.70	EF19-2.7
	1.90...6.30	EF19-6.3
	5.70...18.9	EF19-18.9
	9.00...30.0	EF45-30
	15.0...45.0	EF45-45

## Thermal Overload Relays - TF Series

For	Setting Range A	Part No.
AF09...AF38Z	0.10...0.13	TF42-0.13
	0.13...0.17	TF42-0.17
	0.17...0.23	TF42-0.23
	0.23...0.31	TF42-0.31
	0.31...0.41	TF42-0.41
	0.41...0.55	TF42-0.55
	0.55...0.74	TF42-0.74
	0.74...1.00	TF42-1.0
	1.00...1.30	TF42-1.3
	1.30...1.70	TF42-1.7
	1.70...2.30	TF42-2.3
	2.30...3.10	TF42-3.1
	3.10...4.20	TF42-4.2
	4.20...5.70	TF42-5.7
	5.70...7.60	TF42-7.6
	7.60...10.0	TF42-10
	10.0...13.0	TF42-13
	13.0...16.0	TF42-16
	16.0...20.0	TF42-20
	20.0...24.0	TF42-24
	24.0...29.0	TF42-29
	29.0...35.0	TF42-35
	35.0...38.0	TF42-38

## Contactors - DILM Series

3 Pole			Ratings		Aux Contacts		Part No.	Insert Coil Voltage
AC1 Amps	AC3 Amps	@ 415V kW	NO	NC				
22	7	3	-	-	DILM7-10	<input type="checkbox"/>		
			-	1	DILM7-01	<input type="checkbox"/>		
	9	4	-	-	DILM9-10	<input type="checkbox"/>		
			-	1	DILM9-01	<input type="checkbox"/>		
	12	5.5	-	-	DILM12-10	<input type="checkbox"/>		
			-	1	DILM12-01	<input type="checkbox"/>		
15	7.5	-	-	DILM15-10	<input type="checkbox"/>			
		-	1	DILM15-01	<input type="checkbox"/>			
40	18	7.5	-	-	DILM17-10	<input type="checkbox"/>		
			-	1	DILM17-01	<input type="checkbox"/>		
45	25	11	-	-	DILM25-10	<input type="checkbox"/>		
			-	1	DILM25-01	<input type="checkbox"/>		
60	32	15	-	-	DILM32-10	<input type="checkbox"/>		
			-	1	DILM32-01	<input type="checkbox"/>		
80	38	18.5	-	-	DILM38-10	<input type="checkbox"/>		
			-	1	DILM38-01	<input type="checkbox"/>		
110	40	18.5	-	-	DILM40	<input type="checkbox"/>		
			-	-	DILM50	<input type="checkbox"/>		
130	50	22	-	-	DILM65	<input type="checkbox"/>		
			-	-	DILM72	<input type="checkbox"/>		
160	72	37	-	-	DILM80	<input type="checkbox"/>		
			-	-	DILM95	<input type="checkbox"/>		
190	115	55	-	-	DILM115	<input type="checkbox"/>		
			-	-	DILM150	<input type="checkbox"/>		
225	150	75	-	-	DILM170	<input type="checkbox"/>		
			-	-				

## Accessories

Auxiliary Contact Blocks		Aux Contacts		Part No.
For	Position	NO	NC	
DILM7...38 Series	Top	1	1	DILM32-XHI11
		-	2	DILM32-XHI02
		2	2	DILM32-XHI22
DILM40...170 Series	Top	1	1	DILM150-XHI11
		0	2	DILM150-XHI02
		2	-	DILM150-XHI20
		4	-	DILM150-XHI40
		3	1	DILM150-XHI31
		2	2	DILM150-XHI22
DILM17...38 Series	Side	1	3	DILM150-XHI13
		-	4	DILM150-XHI04
DILM17...38 Series	Side	1	1	DILM32-XHI11-S
DILM40...170 Series	Side	1	1	DILM1000-XHI11-SI

Mechanical Interlock		Part No.
For		
DILM7...DILM15		DILM12-XMV
DILM17...DILM38		DILM32-XMV
DILM40...DILM72		DILM65-XMV
DILM80...DILM170		DILM150-XMV

## Contactors Relays - DIL ER Series

DIL ER Series			Ratings		Aux Contacts		Part No.	Insert Coil Voltage
Thermal lth Amps	AC15 @	240V Amps	415V Amps	NO	NC			
10	6	3	4	-	DILER-40	<input type="checkbox"/>		
			3	1	DILER-31	<input type="checkbox"/>		
			2	2	DILER-22	<input type="checkbox"/>		

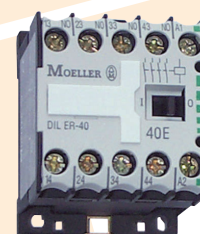
## Accessories

Auxiliary Contact Blocks		Aux Contacts		Part No.
For	Position	NO	NC	
DIL ER	Top	-	2	02DILE
		1	1	11DILE
		2	-	20DILE
		-	4	04DILE
		1	3	13DILE
		2	2	22DILE
		3	1	31DILE
		4	-	40DILE



**Part No. Completion**  
When ordering complete the Part No. by adding the following:-

- AC Version up to DIL M95 :-
  - Coil Voltage
    - 24V 50Hz 24V50
    - 110V 50Hz 110V50
    - 230V 50Hz RAC250
    - 400V 50Hz RAC500
- AC Version from DIL M115:-
  - 24V 50Hz RAC24
  - 110V 50Hz RAC120
  - 230V 50Hz RAC240
  - 400V 50Hz RAC440
- DC Version up to DIL M15 :-
  - 24V DC 24VDC
- DC Version from DIL M17 :-
  - 24V DC RDC24



**Part No. Completion**  
When ordering complete the Part No. by adding the following:-

- Mechanical Latch Blocks
  - 50Hz
  - 24V 24V50HZ
  - 100V/120V 110V50HZ/120V50HZ
  - 220V/240V 230V50HZ
  - 400V 400V50HZ



## Thermal Overload Relays

### ZB Series

For	Setting Range A	Part No.
DILM7...DILM15	0.1 - 0.16	ZB12-0.16
	0.16 - 0.24	ZB12-0.24
	0.24 - 0.4	ZB12-0.4
	0.4 - 0.6	ZB12-0.6
	0.6 - 1	ZB12-1
	1 - 16	ZB12-1.6
	1.6 - 2.4	ZB12-2.4
	2.4 - 4	ZB12-4
	4 - 6	ZB12-6
	6 - 10	ZB12-10
	9 - 12	ZB12-12
	12 - 16	ZB12-16
DILM17...DILM38	0.1 - 0.16	ZB32-0.16
	0.16 - 0.24	ZB32-0.24
	0.24 - 0.4	ZB32-0.4
	0.4 - 0.6	ZB32-0.6
	0.6 - 1	ZB32-1
	1 - 16	ZB32-1.6
	1.6 - 2.4	ZB32-2.4
	2.4 - 4	ZB32-4
	4 - 6	ZB32-6
	6 - 10	ZB32-10
	10 - 16	ZB32-16
	16 - 24	ZB32-24
DILM40...DILM72	24 - 32	ZB32-32
	32 - 38	ZB32-38
	6 - 10	ZB65-10
	10 - 16	ZB65-16
	16 - 24	ZB65-24
	24 - 40	ZB65-40
	40 - 57	ZB65-57
DILM80...DILM170	50 - 65	ZB65-65
	65 - 75	ZB65-75
	25 - 35	ZB150-35
	35 - 50	ZB150-50
	50 - 70	ZB150-70
	70 - 100	ZB150-100
	95 - 125	ZB150-125
120 - 150	ZB150-150	
145 - 175	ZB150-175	

## TeSys K Series

### Contactors & Reversing Contactors

Ratings			Coil	No. Of Main Poles	Aux Contacts		Part No.	Insert Coil Voltage
AC1 Amps	AC3 Amps	@ 415V kW			NO	NC		
20	6	2.2	AC	3	1	-	LC1-K0610	<input type="checkbox"/>
					-	1	LC1-K0601	<input type="checkbox"/>
	9	4	AC	3	1	-	LC1-K0910	<input type="checkbox"/>
					-	1	LC1-K0901	<input type="checkbox"/>
	12	5.5	AC	3	1	-	LC1-K1210	<input type="checkbox"/>
					-	1	LC1-K1201	<input type="checkbox"/>

NB. Prices shown are for 24V versions. Call your local branch for prices on higher voltage versions.

## Accessories

### Auxiliary Contact Blocks

For	Position	Aux Contacts		Part No.
		NO	NC	
LC1K	Front	2	-	LA1-KN20
		-	2	LA1-KN02
		1	1	LA1-KN11
		4	-	LA1-KN40
		3	1	LA1-KN31
		2	2	LA1-KN22
		1	3	LA1-KN13
		-	4	LA1-KN04

### Electronic Timers

For	Type	Control Voltage	Time Range	CO	Part No.
20	Delay on	24V...48V AC/DC	0.1 - 30s	1	LA2-KT2E
		110V...240V AC		1	LA2-KT2U

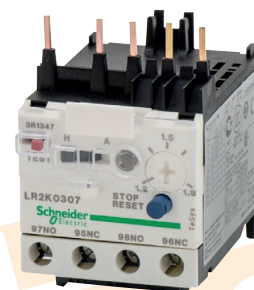
## TeSys LR2K Series

### Thermal Overload Relays

For	Setting Range A	Part No.
LC1K	0.11 - 0.16	LR2 K0301
	0.16 - 0.23	LR2 K0302
	0.23 - 0.36	LR2 K0303
	0.36 - 0.54	LR2 K0304
	0.54 - 0.8	LR2 K0305
	0.8 - 1.2	LR2 K0306
	1.2 - 1.8	LR2 K0307
	1.8 - 2.6	LR2 K0308
	2.6 - 3.7	LR2 K0310
	3.7 - 5.5	LR2 K0312
	5.5 - 8	LR2 K0314
	8 - 11.5	LR2 K0316
10 - 14	LR2 K0321	
12 - 16	LR2 K0322	

### Accessories

Description	Part No.
Separate mounting base	LA7-K0064



Part No. Completion  
When ordering complete the Part No. by adding the following:-

LC1-K0610...LC1-K1201	
50Hz/60Hz	<input type="checkbox"/>
24	B7
48	E7
110	F7
240	U7
415	N7





INDUSTRIAL CONTROL

CONTACTORS & OVERLOADS

## Contactors - TeSys D Series

Available in AC and DC control voltages

### Features

- Alternative Ratings <200 Amps
- Spring terminal connections are available
- Contactor c/w Safety Cover
- Separation of Control & Power Circuits
- 1NO + 1NC Auxiliary Contact Built-in
- Same design upto 38 Amps AC3

### 3 Pole Versions

AC1 Amps	Ratings		Aux Contacts		Part No.	Insert Coil Voltage AC or DC
	AC3 Amps	@ 415V kW	NO	NC		
25	9	4	1	1	LC1D09	<input type="checkbox"/>
	12	5.5	1	1	LC1D12	<input type="checkbox"/>
32	18	9	1	1	LC1D18	<input type="checkbox"/>
40	25	11	1	1	LC1D25	<input type="checkbox"/>
50	32	15	1	1	LC1D32	<input type="checkbox"/>
	38	18.5	1	1	LC1D38	<input type="checkbox"/>
(Part No. completion break)						
60	40	22	1	1	LC1D40A	<input type="checkbox"/>
80	50	25	1	1	LC1D50A	<input type="checkbox"/>
	65	30	1	1	LC1D65A	<input type="checkbox"/>
125	80	45	1	1	LC1D80	<input type="checkbox"/>
	95		1	1	LC1D95	<input type="checkbox"/>
200	115	59	1	1	LC1D115	<input type="checkbox"/>
	150	80	1	1	LC1D150	<input type="checkbox"/>

### 4 Pole Versions

AC1 Amps	Ratings		Aux Contacts		Part No.	Insert Coil Voltage AC or DC
	Pole Configuration		NO	NC		
20	4		1	1	LC1DT20	<input type="checkbox"/>
	2	2	2	2	LC1D098	<input type="checkbox"/>
25	4		1	1	LC1DT25	<input type="checkbox"/>
	2	2	1	1	LC1D128	<input type="checkbox"/>
32	4		1	1	LC1DT32	<input type="checkbox"/>
	2	2	1	1	LC1D188	<input type="checkbox"/>
40	4		1	1	LC1DT40	<input type="checkbox"/>
	2	2	1	1	LC1D258	<input type="checkbox"/>

## Accessories

### Auxiliary Contact Blocks

For	Position	Aux Contacts		Part No.
		NO	NC	
LC1D09...LC1D150	Front	1	1	LADN11
		2	-	LADN20
		-	2	LADN02
		2	2	LADN22
		1	3	LADN13
		4	-	LADN40
		-	4	LADN04
		3	1	LADN31
		1	1	LAD8N11
		2	-	LAD8N20
	Side (LC1D09...LC1D38 1 only - LHS)			

NB. Contactors with BL and EL coils can only accept 1 off 2 contact front mounted auxiliary.

Part No. Completion  
When ordering complete the Part No. by adding the following:-

#### LC1D09...LC1D38

Voltage	AC	2.4W DC	5.5W DC
24	B7	BL	BD
48	E7	EL	ED
110	F7		FD
220	M7		MD
230	P7		
240	U7		UD
380	Q7		
400	V7		
415	N7		

#### LC1D40...LC1D150

Voltage	AC	2.4W DC
24	B7	BD
48	E7	ED
110	F7	FD
220	M7	MD
230	P7	
240	U7	
380	Q7	
400	V7	
415	N7	

## Interlocks

For	Type	Part No.
LC1D09...LC1D38	Interlock	LAD9V2
	Interlock + power connections + control	LAD9R1V
	Interlock + power connections	LAD9R1
LC1D40A...LC1D65A	Interlock without integral electrical interlocking	LAD4CM
	Power connections	LA9D65A69
	Interlock (AC)	LA9D4002
LC1D80...LC1D95	Interlock (DC)	LA9D8002
	Interlock without integral electrical interlocking	LA9D50978
	Power connections	LA9D8069
	Interlock	LA9D11502
LC1D115...LC1D150	Interlock	LA9D11502
	Power connections	LA9D11569

## Time Delay Auxiliary Contact Block

For	Type	Time Range	NO	NC	Part No.
LC1D09...LC1D150	Delay on	0.1 - 3s	1	1	LADT0
		0.1 - 30s	1	1	LADT2
		10 - 180s	1	1	LADT4
	Delay off	0.1 - 3s	1	1	LADR0
		0.1 - 30s	1	1	LADR2
		10 - 180s	1	1	LADR4

## Star Delta Timers

For	Type	Time Range	Part No.
LC1D09...LC1D150	Delay on	0.1 - 30s	LADS2

## Surge Suppression

For	Type	Voltage	Part No.
LC1D09...LC1D38	AC	24 - 48V AC	LAD4RCE
		110 - 240V AC	LAD4RCU
		24 - 48V AC	LAD4RC3E
LC1D40A...LC1D65A (3P)	AC	50 - 127V AC	LAD4RC3G
		110 - 240V AC	LAD4RC3U
		24 - 48V DC	LAD4V3E
	DC	50 - 127V DC	LAD4V3G
		110 - 250V DC	LAD4V3U

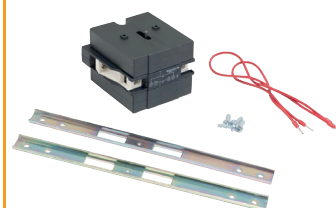
## Thermal Overload Relays TeSys Series

For	Setting Range A	Part No.
D09...D38	0.10 - 0.16	LRD01
	0.16 - 0.25	LRD02
	0.25 - 0.40	LRD03
	0.40 - 0.63	LRD04
	0.63 - 1	LRD05
	1 - 1.6	LRD06
	1.6 - 2.5	LRD07
	2.5 - 4	LRD08
	4 - 6	LRD10
	5.5 - 8	LRD12
	7 - 10	LRD14
	9 - 13	LRD16
	12 - 18	LRD21
	16 - 24	LRD22
	23 - 32	LRD32
	30 - 38	LRD35
	D40A...D65A	9 - 13
12 - 18		LRD318
17 - 25		LRD325
23 - 32		LRD332
30 - 40		LRD340
D50A and D65A	37 - 50	LRD350
	48 - 65	LRD365
	17 - 25	LRD3322
	23 - 32	LRD3353
	30 - 40	LRD3355
D80...D95	37 - 50	LRD3357
	48 - 65	LRD3359
	55 - 70	LRD3361
	63 - 80	LRD3363
	80 - 104	LRD3365
	80 - 104	LRD4365
D115...D150	95 - 120	LRD4367
	110 - 140	LRD4369
Independent mounting	80 - 104	LRD33656
	95 - 120	LRD33676
	110 - 140	LRD33696

## Remote Mounting Block

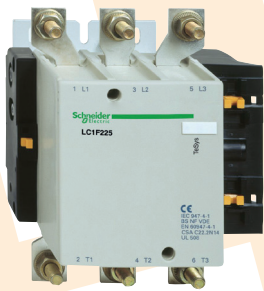
For	Part No.
LRD01-LRD35	LAD7B106
LRD313-LRD365	LAD96560
LRD3322-LRD4369	LA7D3064

Schneider Electric



### TeSys Overload Relays

- Class 10A tripping
- Relays with manual or automatic reset
- with Relay trip indicator
- For AC or DC
- Screw clamp terminals
- Protective cover for unauthorised adjustment



## Contactors for Motor Control - TeSys F Range

### 3 Pole Without Coil

Ratings			
AC1 Amps	AC3 @415V Amps	kW	Part No.
275	185	100	LC1 F185
315	225	110	LC1 F225
350	265	140	LC1 F265
400	330	180	LC1 F330
500	400	220	LC1 F400
700	500	280	LC1 F500
1000	630	375	LC1 F630
1600	780	450	LC1 F780

### Coils

For	Type	Part No.	Insert Coil Voltage
LC1 F185 & F225	AC	LX1 FG	<input type="checkbox"/>
	DC	LX4 FG	<input type="checkbox"/>
LC1 F265 & F330	AC	LX1 FH	<input type="checkbox"/>
	DC	LX4 FH	<input type="checkbox"/>
LC1 F400	AC	LX1 FJ	<input type="checkbox"/>
	DC	LX4 FJ	<input type="checkbox"/>
LC1 F500	AC	LX1 FK	<input type="checkbox"/>
	DC	LX4 FK	<input type="checkbox"/>
LC1 F630	AC	LX1 FL	<input type="checkbox"/>
	DC	LX4 FL	<input type="checkbox"/>
LC1 F780	AC	LX1 FX	<input type="checkbox"/>

### Electronic Overload Relay

For	Setting Range A	Part No.
F185	30 - 50	LR9 F5357
	48 - 80	LR9 F5363
F185...F400	60 - 100	LR9 F5367
	90 - 150	LR9 F5369
F225...F500	132 - 220	LR9 F5371
	200 - 330	LR9 F7375
F400...F630	300 - 500	LR9 F7379
	380 - 630	LR9 F7381

### Accessories

#### Auxiliary Contact Blocks

For	Position	No	NC	Part No.
LC1F185...LC1F780	Front	1	1	LADN11
		2	-	LADN20
		-	2	LADN02
		2	2	LADN22
		1	3	LADN13
		4	-	LADN40
		-	4	LADN04
		3	1	LADN31

Maximum of 2 per contactor

#### Pneumatic Timers

For	Type	Time Range	No	NC	Part No.
LC1F185...LC1F780	Delay on	0,1 - 3s	1	1	LADT0
		0,1 - 30s	1	1	LADT2
		10 - 180s	1	1	LADT4
	Delay off	0,1 - 3s	1	1	LADR0
		0,1 - 30s	1	1	LADR2
		10 - 180s	1	1	LADR4

**Part No. Completion**  
When ordering complete the Part No. by adding the following:-

Coil Voltage	<input type="checkbox"/>
24V AC/DC	024
48V AC/DC	048
110V AC/DC	110
240V AC	240
415V AC	415

Sirius Contactors for Switching Motors

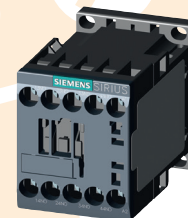
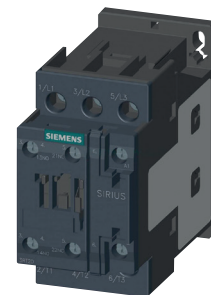
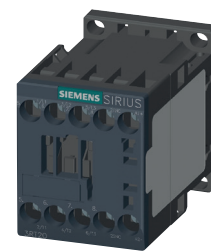
Contactors for Switching Motors					
Size	Rated Control Supply Voltage	AC3 400V	AC1 690V	Auxiliary Contacts	Part No. * 1 = NO Aux, 2 = NC Aux
S00 3kW	24V AC, 50/60Hz	7	18		3RT2015-1AB0*
	110V AC, 50/60Hz				3RT2015-1AF0*
	230V AC, 50/60Hz				3RT2015-1AP0*
S00 4kW	24V DC	9			3RT2015-1BB4*
	24V AC, 50/60Hz				3RT2016-1AB0*
	110V AC, 50/60Hz				3RT2016-1AF0*
S00 5.5kW	230V AC, 50/60Hz	12	22	1NO/1NC	3RT2016-1AP0*
	24V DC				3RT2016-1BB4*
	24V AC, 50/60Hz				3RT2017-1AB0*
S00 7.5kW	110V AC, 50/60Hz	16			3RT2017-1AF0*
	230V AC, 50/60Hz				3RT2017-1AP0*
	24V DC				3RT2017-1BB4*
S0 7.5kW	24V AC, 50Hz	17	40		3RT2018-1AB0*
	110V AC, 50Hz				3RT2018-1AF0*
	230V AC, 50Hz				3RT2018-1AP0*
S0 11kW	24V DC	25	40	1NO+1NC	3RT2018-1BB4*
	24V AC, 50Hz				3RT2025-1AB00
	110V AC, 50Hz				3RT2025-1AF00
S0 15kW	230V AC, 50Hz	32	50		3RT2025-1AP00
	24V DC				3RT2025-1BB40
	24V AC, 50Hz				3RT2026-1AB00
S0 18.5kW	110V AC, 50Hz	38	50		3RT2026-1AF00
	230V AC, 50Hz				3RT2026-1AP00
	24V DC				3RT2026-1BB40
S0 18.5kW	24V AC, 50Hz	38	50		3RT2027-1AB00
	110V AC, 50Hz				3RT2027-1AF00
	230V AC, 50Hz				3RT2027-1AP00
S0 18.5kW	24V DC	38	50		3RT2027-1BB40
	24V AC, 50Hz				3RT2028-1AB00
	110V AC, 50Hz				3RT2028-1AF00
S0 18.5kW	230V AC, 50Hz	38	50		3RT2028-1AP00
	24V DC				3RT2028-1BB40

Sirius Contactors for Switching Motors

Contactors for Switching Motors					
Size	Rated Control Supply Voltage	AC3 400V	AC1 690V	Auxiliary Contacts	Part No. * 1 = NO Aux, 2 = NC Aux
S2 18.5kW	110V AC, 50Hz	40	60		3RT2035-1AF00
	230V AC, 50Hz				3RT2035-1AP00
	20 ... 33V AC/DC				3RT2035-1NB30
S2 22kW	110V AC, 50Hz	50	70		3RT2036-1AF00
	230V AC, 50Hz				3RT2036-1AP00
	20 ... 33V AC/DC				3RT2036-1NB30
S2 30kW	110V AC, 50Hz	65	80		3RT2037-1AF00
	230V AC, 50Hz				3RT2037-1AP00
	20 ... 33V AC/DC				3RT2037-1NB30
S2 37kW	110V AC, 50Hz	80	90		3RT2038-1AF00
	230V AC, 50Hz				3RT2038-1AP00
	20 ... 33V AC/DC				3RT2038-1NB30
S3 45kW	110V AC, 50Hz	95	130		3RT2046-1AF00
	230V AC, 50Hz				3RT2046-1AP00
	20 ... 33V AC/DC				3RT2046-1NB30
S3 55kW	110V AC, 50Hz	110	130		3RT2047-1AF00
	230V AC, 50Hz				3RT2047-1AP00
	20 ... 33V AC/DC				3RT2047-1NB30

Contactor Relays S00	
Description	Part No.
Contactor relay 4NO, 230V, 50/60Hz	3RH2140-1AP00
Contactor relay 4NO, 24V DC	3RH2140-1BB40
Contactor relay 3NO + 1NC, 230V, 50/60Hz	3RH2131-1AP00
Contactor relay 3NO + 1NC, 24V DC	3RH2131-1BB40
Contactor relay 2NO + 2NC, 230V, 50/60Hz	3RH2122-1AP00
Contactor relay 2NO + 2NC, 24V DC	3RH2122-1BB40

SIEMENS

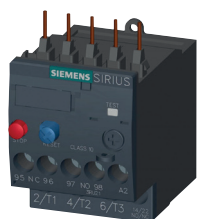
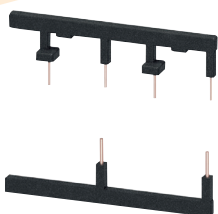
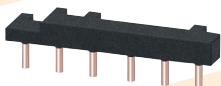
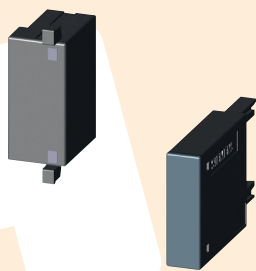


INDUSTRIAL CONTROL

CONTACTORS & OVERLOADS



## SIEMENS



### Accessories Contactors, Contactor Relays

Description	Part No.
Auxiliary switch block, 4NO, size S00, S0 & S2	3RH2911-1FA40
Auxiliary switch block 2NO+2NC, size S00, S0 & S2	3RH2911-1HA22
Auxiliary switch block, 1NO+1NC, size S00, S0 & S2	3RH2911-1HA11
Auxiliary switch block, 2NO, size S00, S0 and S2	3RH2911-1HA20
RC element AC 127...240V size S00	3RT2916-1CD00
Suppression diode DC 24V, size S00	3RT2916-1DG00
Surge suppressor size S00 (AC 24...48V; DC 24...70V)	3RT2916-1BB00
RC element AC 127...240V, size S0	3RT2926-1CD00
Surge suppressor, size S0 (AC 24...48V; DC 24...70V)	3RT2926-1BB00
RC element AC 127...240V size S2	3RT2936-1CD00
Surge suppressor, size S2 (AC 24...48V; DC 24...70V)	3RT2936-1BB00

### Components for Customer Assembly of Reversing & Star-Delta Starters

Description	Part No.
<b>3RT202 S0-S0</b> - The reversing assembly kit contains: Mechanical interlock, 2 connecting clips for 2 contactors, wiring modules on the top and bottom • For main, auxiliary and control circuits (1) • Only for main circuit (2)	3RA2923-2AA1
<b>3RT203 S2-S2</b> - The reversing assembly kit contains: 2 connecting pins for 2 contactors, wiring modules on the top and bottom • For main and auxiliary circuits • Only for main circuit (3)	3RA2933-2AA1
<b>3RT201 S00-S00-S00</b> - The star-delta assembly kit contains: Mechanical interlock, 4 connecting clips for 3 contactors, a star jumper, wiring modules on the top and bottom • For main, auxiliary and control circuits	3RA2913-2BB1
<b>3RT202 S0-S0-S0</b> - The star-delta assembly kit contains: Mechanical interlock, 4 connecting clips for 3 contactors, a star jumper, wiring modules on the top and bottom • For main, auxiliary and control circuits (1) • Only for main circuit (2)	3RA2923-2BB1
<b>3RT203 S2-S2-S2</b> - The star-delta assembly kit contains: 4 connecting pins for 3 contactors, an S2 star jumper and wiring modules on the top and bottom for the main circuit and the auxiliary circuit, a cable for connecting the A2 coil contact from the line contactor to the A2 coil contact of the delta contactor. • Wiring modules on the top and bottom for the main circuit, a cable set for the auxiliary circuit and a cable for connecting the A2 coil contact from the line contactor to the A2 coil contact of the delta contactor. • Wiring modules on the top and bottom for the main circuit, a cable set for the auxiliary circuit and a cable for connecting the A2 coil contact from the line contactor to the A2 coil contact of the delta contactor.	3RA2933-2BB1

(1) Use of the 3RA2923-2AA1 assembly kit in conjunction with the 3RT202-.....-3MA0 contactors is limited because the auxiliary switches in the basic unit are not allowed to be used on account of the permanently mounted auxiliary switch block.

(2) Version in size S0 with spring-type terminals: Only the wiring modules for the main circuit are included. No connectors are included for the auxiliary and control circuit.

(3) Version in size S2 with spring-type terminals in the auxiliary and control circuits: Only the wiring modules for the main circuit are included. A cable set is included for the auxiliary circuit.

### Sirius Overload relays

#### Thermal for Mounting onto Contactors, Class 10

Size	Setting Range (A)	Part No.
S00	0.45 ... 0.63	3RU2116-0GB0
	0.7 ... 1	3RU2116-0JB0
	0.9 ... 1.25	3RU2116-0KB0
	1.1 ... 1.6	3RU2116-1AB0
	1.4 ... 2	3RU2116-1BB0
	2.2 ... 3.2	3RU2116-1DB0
	2.8 ... 4	3RU2116-1EB0
	4.5 ... 6.3	3RU2116-1GB0
	5.5 ... 8	3RU2116-1HB0
	7 ... 10	3RU2116-1JB0
S0	9 ... 12.5	3RU2116-1KB0
	11 ... 16	3RU2116-4AB0
	14 ... 20	3RU2126-4BB0
	20 ... 25	3RU2126-4DB0
	27 ... 32	3RU2126-4EB0
	34 ... 40	3RU2126-4FB0
	28 ... 40	3RU2136-4FB0
	36 ... 45	3RU2136-4GB0
S2	40 ... 50	3RU2136-4HB0
	47 ... 57	3RU2136-4QB0
	54 ... 65	3RU2136-4JB0
	62 ... 73	3RU2136-4KB0
	70 ... 80	3RU2136-4RB0

## Manual Motor Starters

Open design, enclosure IP20, resistant to changeable climates. Quick fastening on mounting rails  
DIN EN 50 022, 35mm without auxiliary switch.

### MS 116, 132, 450 & 495 Series

Type	Rating	Part No.
MS116 50kA Short Circuit Protection	0.16 - 0.25	MS116-0.25
	0.25 - 0.40	MS116-0.4
	0.40 - 0.63	MS116-0.63
	0.63 - 1.00	MS116-1.0
	1.00 - 1.60	MS116-1.6
	1.60 - 2.50	MS116-2.5
	2.50 - 4.00	MS116-4.0
	4.00 - 6.30	MS116-6.3
	6.30 - 10.00	MS116-10
	8.00 - 12.00	MS116-12
	10.00 - 16.00	MS116-16
	16.00 - 20.00	MS116-20
	20.00 - 25.00	MS116-25
25.00 - 32.00	MS116-32	
MS132 100kA Short Circuit Protection	0.40 - 0.63	MS132-0.63
	0.63 - 1.00	MS132-1.0
	1.00 - 1.60	MS132-1.6
	1.60 - 2.50	MS132-2.5
	2.50 - 4.00	MS132-4.0
	4.00 - 6.30	MS132-6.3
	6.30 - 10.00	MS132-10
	10.00 - 16.00	MS132-16
	16.00 - 20.00	MS132-20
	20.00 - 25.00	MS132-25
MS450-495	25.00 - 32.00	MS132-32
	28.00 - 40.00	MS450-40
	40.00 - 50.00	MS450-50
	45.00 - 63.00	MS495-63
	57.00 - 75.00	MS495-75
	70.00 - 90.00	MS495-90
	80.00 - 100.00	MS495-100

### Accessories

For	Mounting	NO	NC	Part No.
Auxiliary Contact Blocks	Front	1	1	HKF1-11
		1	1	HK1-11
		2	-	HK1-20
MS116 - MS132 Series	Side	-	2	HK1-02
		1	1	SK1-11
Signal Contact	Side	2	-	SK1-20
		-	2	SK1-02

### Under Voltage Releases

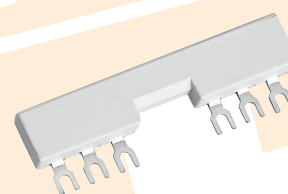
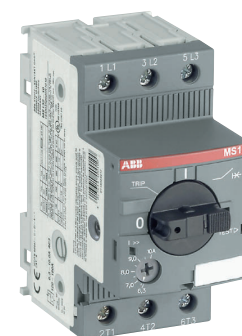
Type	AC Voltage	Part No.
MS116 - MS132 Series	24V	UA1-24
	48V	UA1-48
	110V	UA1-110
	230V	UA1-230
	415V	UA1-415

### Busbar

For	No. of Devices Connected	No. of Auxiliary switches	Part No.
MS116 - MS132 65A Rated	2	-	PS1-2-0-65
		1	PS1-2-1-65
		2	PS1-2-2-65
		-	PS1-3-0-65
		1	PS1-3-1-65
	3	2	PS1-3-2-65
		-	PS1-4-0-65
		1	PS1-4-1-65
		2	PS1-4-2-65
		-	PS1-5-0-65
	4	1	PS1-5-1-65
		2	PS1-5-2-65
		1	PS1-5-1-65
		2	PS1-5-2-65
		1	PS1-5-1-65
5	2	PS1-5-2-65	
Busbar cover			BSI-3

### Ancillaries

Type	Description	Part No.
Power infeed Blocks 65A	Flat	S1-M1-25
	High	S1-M2-25
Locking Device	Lock adaptor	SA1
	Locking assembly (adaptor SA1, padlock and three keys)	SA3





## Motor Circuit Breakers - PKZM0 & PKZM4 Series

### PKZM0 Series

Motor Rating @ 415V kW	Thermal Tripping Current Amps	Part No.
-	0.1 - 0.16	PKZM0-0.16
0.06	0.16 - 0.25	PKZM0-0.25
0.09	0.25 - 0.4	PKZM0-0.4
0.12	0.4 - 0.63	PKZM0-0.63
0.25	0.63 - 1	PKZM0-1
0.55	1 - 1.6	PKZM0-1.6
0.75	1.6 - 2.5	PKZM0-2.5
1.5	2.5 - 4	PKZM0-4
2.2	4 - 6.3	PKZM0-6.3
4	6.3 - 10	PKZM0-10
7.5	10 - 16	PKZM0-16
9	16 - 20	PKZM0-20
12.5	20 - 25	PKZM0-25
15	25 - 32	PKZM0-32

### PKZM4

Motor Rating @ 415V kW	Thermal Tripping Current Amps	Part No.
7.5	10 - 16	PKZM4-16
12.5	16 - 25	PKZM4-25
15	24 - 32	PKZM4-32
20	32 - 40	PKZM4-40
25	40 - 50	PKZM4-50
30	50 - 58	PKZM4-58
34	55 - 63	PKZM4-63

## Accessories

### Auxiliary Contact Blocks

For	Position	NO	NC	Part No.
PKZM0/PKZM4	Top	1	1	NHI-E-11-PKZO
		1	-	NHI-E-10-PKZO
	Side	1	1	NHI11-PKZO
		1	2	NHI12-PKZO
		2	1	NHI21-PKZO
		2	2	NHI22-PKZO

## Motor Circuit Breakers - TeSys Series

### GV2-ME Series

Rating 415V AC3 (kW)	Overload Release Setting Range	Part No.
-	0.10 - 0.16	GV2 ME01
0.06	0.16 - 0.25	GV2 ME02
0.09	0.25 - 0.40	GV2 ME03
0.12 - 0.18	0.40 - 0.63	GV2 ME04
0.25	0.63 - 1	GV2 ME05
0.37 - 0.55	1 - 1.6	GV2 ME06
0.75	1.6 - 2.5	GV2 ME07
1.1 - 1.5	2.5 - 4	GV2 ME08
2.2	4 - 6.3	GV2 ME10
3 - 4	6 - 10	GV2 ME14
5.5	9 - 14	GV2 ME16
7.5	13 - 18	GV2 ME20
9	17 - 23	GV2 ME21
11	20 - 25	GV2 ME22
15	24 - 32	GV2 ME32

### Accessories

#### Auxiliary Contact Blocks - GV2 / GV3

For	Type	NO	NC	Part No.
		1	1	GVAE11
	Front	2	-	GVAE20
		1	- + 1 No Fault	GVAED101
		1	1	GVAN11
	Side	2	-	GVAN20
		1	+1 No Fault	GVAD1010

#### Power Connection Accessories - GV2 only

For	Type	Part No.
Combination block	Between GV2 and contactor LC1-K or LP1-K	GV2-AF01
	Between GV2 and contactor LC1-D09...D38	GV2-AF3
	2 tap-offs	GV2-G245 GV2-G254
Set of 3-pole 63A busbars	3 tap-offs	GV2-G345 GV2-G354
	4 tap-offs	GV2-G445 GV2-G454
	5 tap-offs	GV2-G554
Terminal blocks for supply to one ore more GV2-G busbar sets	Connection from the top	GV1-G09
	Can be fitted with current limiter GV1-L3 (GV2-ME and GV2-P)	GV2-G05

### GV3-P Series

Rating 415V AC3 (kW)	Overload Release setting Range	Part No.
	9-13A	GV3P13
	12-18A	GV3P18
	17-25A	GV3P25
	23-32A	GV3P32
	30-40A	GV3P40
	37-50A	GV3P50
	48-65A	GV3P65

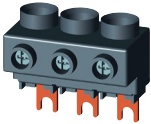
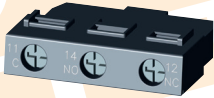
### Power Connection Accessories

Description	For	Part No.
Set of 115A busbars for parallelling of contactors	2 contactors LC1 D40A...D65A or GV3P	GV3 G264
	3 contactors LC1 D40A...D65A or GV3P	GV3 G364





## SIEMENS



### Sirius Motor Starter Breakers

#### Class 10, Screw-Type Connection

Size	Setting Range (A)	Power (kW)	Rated Current (A)	Part No.
S00	0.45...0.63	0.18	0.63	3RV2011-0GA10
	0.7...1.00	0.25	1.00	3RV2011-0JA10
	0.9...1.25	0.37	1.25	3RV2011-0KA10
	1.1...1.6	0.55	1.60	3RV2011-1AA10
	1.4...2	0.75	2.00	3RV2011-1BA10
	2.2...3.2	1.1	3.20	3RV2011-1DA10
	2.8...4	1.5	4.00	3RV2011-1EA10
	3.5...5	1.5	5.00	3RV2011-1FA10
	4.5...6.3	2.2	6.30	3RV2011-1GA10
	5.5...8	3.0	8.00	3RV2011-1HA10
S0	7...10	4.0	10.0	3RV2011-1JA10
	9...12.5	5.5	12.5	3RV2011-1KA10
	10...16	7.5	16.0	3RV2011-4AA10
	5.5...8	3.0	8.0	3RV2021-1HA10
	7...10	4.0	10.0	3RV2021-1JA10
	9...12.5	4.5	12.5	3RV2021-1KA10
	13...20	7.5	20.0	3RV2021-4BA10
	18...25	11	25.0	3RV2021-4DA10
	27...32	15	32.0	3RV2021-4EA10
	30...36	18.5	36.0	3RV2021-4PA10
32...40	40.0		3RV2031-4UA10	
S2	35...45	22	45.0	3RV2031-4VA10
	42...52		52.0	3RV2031-4WA10
	49...59	30	59.0	3RV2031-4XA10
	54...65		65.0	3RV2031-4JA10
	62...73	37	73.0	3RV2031-4KA10
	70...80		80.0	3RV2031-4RA10

#### Accessories

Description	Part No.
Transverse auxiliary switch, 1NO+1NC (S00, S0, S2)	3RV2901-1E
Lateral auxiliary switch, 1NO+1NC (S00, S0, S2)	3RV2901-1A
3-Phase infeed terminal, connection from above, S00, S0	3RV2925-5AB
3-Phase infeed terminal, connection from above, S2	3RV2935-5A