

# A9 ... A30 3-pole contactors

## Technical data

### Main pole - Utilization characteristics according to IEC

Contactors types	AC operated	A9	A12	A16	A26	A30
<b>Standards</b>		IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1				
<b>Rated operational voltage U<sub>e</sub> max.</b>		690 V				
<b>Rated frequency (without derating)</b>		50 / 60 Hz				
<b>Conventional free-air thermal current I<sub>th</sub></b>						
acc. to IEC 60947-4-1, open contactors, $\theta \leq 40^\circ\text{C}$		26 A	28 A	30 A	45 A	65 A
With conductor cross-sectional area		4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	16 mm <sup>2</sup>
<b>AC-1 Utilization category</b>						
For air temperature close to contactor						
<b>I<sub>e</sub> / Rated operational current AC-1</b>						
U <sub>e</sub> max. $\leq 690\text{ V}$ , 50/60 Hz	$\theta \leq 40^\circ\text{C}$	25 A	27 A	30 A	45 A	55 A
	$\theta \leq 55^\circ\text{C}$	22 A	25 A	27 A	40 A	55 A
	$\theta \leq 70^\circ\text{C}$	18 A	20 A	23 A	32 A	39 A
With conductor cross-sectional area		2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	10 mm <sup>2</sup>
<b>AC-3 Utilization category</b>						
For air temperature close to contactor $\theta \leq 55^\circ\text{C}$						
<b>I<sub>e</sub> / Max. rated operational current AC-3 (1)</b>						
	220-230-240 V	9 A	12 A	17 A	26 A	33 A
	380-400 V	9 A	12 A	17 A	26 A	32 A
	415 V	9 A	12 A	17 A	26 A	32 A
	440 V	9 A	12 A	16 A	26 A	32 A
	500 V	9 A	12 A	14 A	22 A	28 A
	690 V	7 A	9 A	10 A	17 A	21 A
<b>Rated operational power AC-3 (1)</b>						
	220-230-240 V	2.2 kW	3 kW	4 kW	6.5 kW	9 kW
	380-400 V	4 kW	5.5 kW	7.5 kW	11 kW	15 kW
	415 V	4 kW	5.5 kW	9 kW	11 kW	15 kW
	440 V	4 kW	5.5 kW	9 kW	15 kW	18.5 kW
	500 V	5.5 kW	7.5 kW	9 kW	15 kW	18.5 kW
	690 V	5.5 kW	7.5 kW	9 kW	15 kW	18.5 kW
<b>Rated making capacity AC-3</b>		10 x I <sub>e</sub> AC-3 acc. to IEC 60947-4-1				
<b>Rated breaking capacity AC-3</b>		8 x I <sub>e</sub> AC-3 acc. to IEC 60947-4-1				
<b>AC-8a Utilization category</b>						
(without thermal overload relay - U <sub>e</sub> 400 V 50/60 Hz - $\theta \leq 40^\circ\text{C}$ )						
<b>I<sub>e</sub> / Rated operational current AC-8a</b>		12 A	16 A	22 A	30 A	40 A
<b>Rated operational power AC-8a</b>		5.5 kW	7.5 kW	11 kW	15 kW	20 kW
<b>Short-circuit protection device for contactors</b>						
without thermal overload relay - Motor protection excluded (2)						
U <sub>e</sub> $\leq 500\text{ V AC}$ - gG type fuse		25 A	32 A	32 A	50 A	63 A
<b>Rated short-time withstand current I<sub>cw</sub></b>						
at 40 °C ambient temperature, in free air from a cold state	1 s	250 A	280 A	300 A	400 A	600 A
	10 s	100 A	120 A	140 A	210 A	400 A
	30 s	60 A	70 A	80 A	110 A	225 A
	1 min	50 A	55 A	60 A	90 A	150 A
	15 min	26 A	28 A	30 A	45 A	65 A
<b>Maximum breaking capacity</b>						
cos $\phi = 0.45$	at 440 V	250 A			420 A	820 A
	at 690 V	90 A			170 A	340 A
<b>Power dissipation per pole</b>						
	I <sub>e</sub> / AC-1	0.8 W	1 W	1.2 W	1.8 W	2.5 W
	I <sub>e</sub> / AC-3	0.1 W	0.2 W	0.35 W	0.6 W	0.9 W
<b>Max. electrical switching frequency</b>						
	AC-1	600 cycle/h				
	AC-3	1200 cycle/h				
	AC-2, AC-4	300 cycle/h				

(1) For the corresponding kW/A or hp/A values of 1500 r.p.m. 50 Hz or 1800 r.p.m. 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".

(2) For the protection of motor starters against short circuits, see "Coordination with short-circuit protection devices".

# A40 ... A110 3-pole contactors

## Technical data

### Main pole - Utilization characteristics according to IEC

Contactor types	AC operated	A40	A50	A63	A75	A95	A110
<b>Standards</b>		IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1					
<b>Rated operational voltage U<sub>e</sub> max.</b>		690 V	1000 V				
<b>Rated frequency (without derating)</b>		50/60 Hz					
<b>Conventional free-air thermal current I<sub>th</sub></b> acc. to IEC 60947-4-1, open contactors, $\theta \leq 40\text{ °C}$		65 A	100 A	125 A	125 A	145 A	160 A
With conductor cross-sectional area		16 mm <sup>2</sup>	35 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	70 mm <sup>2</sup>
<b>AC-1 Utilization category</b> For air temperature close to contactor							
<b>I<sub>e</sub> / Rated operational current AC-1</b> U <sub>e</sub> max. $\leq 690\text{ V}$ , 50/60 Hz	$\theta \leq 40\text{ °C}$	60 A	100 A	115 A	125 A	145 A	160 A
	$\theta \leq 55\text{ °C}$	60 A	85 A	95 A	105 A	135 A	145 A
	$\theta \leq 70\text{ °C}$	42 A	70 A	80 A	85 A	115 A	130 A
With conductor cross-sectional area		16 mm <sup>2</sup>	35 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	70 mm <sup>2</sup>
<b>AC-3 Utilization category</b> For air temperature close to contactor $\theta \leq 55\text{ °C}$							
<b>I<sub>e</sub> / Max. rated operational current AC-3 (1)</b>							
	220-230-240 V	40 A	53 A	65 A	75 A	96 A	110 A
	380-400 V	37 A	50 A	65 A	75 A	96 A	110 A
	415 V	37 A	50 A	65 A	75 A	96 A	110 A
	440 V	37 A	45 A	65 A	70 A	93 A	100 A
	500 V	33 A	45 A	55 A	65 A	80 A	100 A
	690 V	25 A	35 A	43 A	46 A	65 A	82 A
	1000 V	–	23 A	25 A	28 A	30 A	30 A
<b>Rated operational power AC-3 (1)</b>							
	220-230-240 V	11 kW	15 kW	18.5 kW	22 kW	25 kW	30 kW
	380-400 V	18.5 kW	22 kW	30 kW	37 kW	45 kW	55 kW
	415 V	18.5 kW	25 kW	37 kW	40 kW	55 kW	59 kW
	440 V	22 kW	25 kW	37 kW	40 kW	55 kW	59 kW
	500 V	22 kW	30 kW	37 kW	45 kW	55 kW	59 kW
	690 V	22 kW	30 kW	37 kW	40 kW	55 kW	75 kW
	1000 V	–	30 kW	33 kW	37 kW	40 kW	40 kW
<b>Rated making capacity AC-3</b>		10 x I <sub>e</sub> AC-3 acc. to IEC 60947-4-1					
<b>Rated breaking capacity AC-3</b>		8 x I <sub>e</sub> AC-3 acc. to IEC 60947-4-1					
<b>AC-8a Utilization category</b> (without thermal overload relay - U <sub>e</sub> 400 V 50/60 Hz - $\theta \leq 40\text{ °C}$ )							
<b>I<sub>e</sub> / Rated operational current AC-8a</b>		50 A	63 A	85 A	95 A	120 A	140 A
<b>Rated operational power AC-8a</b>		22 kW	30 kW	45 kW	45 kW	55 kW	75 kW
<b>Short-circuit protection device for contactors</b> without thermal overload relay - Motor protection excluded (2) U <sub>e</sub> $\leq 500\text{ V AC}$ - gG type fuse		63 A	100 A	125 A	160 A	160 A	200 A
<b>Rated short-time withstand current I<sub>cw</sub></b> at 40 °C ambient temperature, in free air from a cold state	1 s	600 A	1000 A			1320 A	
	10 s	400 A	650 A			800 A	
	30 s	225 A	370 A			500 A	
	1 min	150 A	250 A			350 A	
	15 min	65 A	110 A	135 A	135 A	160 A	175 A
<b>Maximum breaking capacity</b> cos $\phi = 0.45$	at 440 V	820 A	1300 A			1160 A	
	at 690 V	340 A	630 A			800 A	
<b>Power dissipation per pole</b>	I <sub>e</sub> / AC-1	3 W	5 W	6.5 W	7 W	6.5 W	7.5 W
	I <sub>e</sub> / AC-3	1.3 W	1.3 W	1.5 W	2 W	2.7 W	3.6 W
<b>Max. electrical switching frequency</b>	AC-1	600 cycles/h				300 cycles/h	
	AC-3	1200 cycles/h	600 cycles/h		300 cycles/h		
	AC-2, AC-4	300 cycles/h	150 cycles/h				



3-phase motors



1500 r.p.m. 50 Hz  
1800 r.p.m. 60 Hz  
3-phase motors

(1) For the corresponding kW/A or hp/A values of 1500 r.p.m, 50 Hz or 1800 r.p.m, 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".  
(2) For the protection of motor starters against short circuits, see "Coordination with short-circuit protection devices".

# A145 ... A300 3-pole contactors

## Technical data

### Main pole - Utilization characteristics according to IEC

Contactors types	AC operated	A145	A185	A210	A260	A300
<b>Standards</b>		IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1				
<b>Rated operational voltage U<sub>e</sub> max.</b>		1000 V			690 V	
<b>Rated frequency (without derating)</b>		50/60 Hz				
<b>Conventional free-air thermal current I<sub>th</sub></b>						
acc. to IEC 60947-4-1, open contactors, $\theta \leq 40^\circ\text{C}$		250 A	275 A	350 A	400 A	500 A (4)
With conductor cross-sectional area (3)		120 mm <sup>2</sup>	150 mm <sup>2</sup>	185 mm <sup>2</sup>	240 mm <sup>2</sup>	300 mm <sup>2</sup> (4)
<b>AC-1 Utilization category</b>						
For air temperature close to contactor						
<b>I<sub>e</sub> / Rated operational current AC-1</b>	$\theta \leq 40^\circ\text{C}$	250 A	275 A	350 A	400 A	500 A (4)
U <sub>e</sub> max. $\leq 690\text{ V}$ , 50/60 Hz	$\theta \leq 55^\circ\text{C}$	230 A	250 A	300 A	350 A	400 A (4)
	$\theta \leq 70^\circ\text{C}$	180 A	180 A	240 A	290 A	325 A (4)
<b>I<sub>e</sub> / Rated operational current AC-1</b>	$\theta \leq 40^\circ\text{C}$	180 A	200 A	–	–	–
U <sub>e</sub> max. $\leq 1000\text{ V}$ , 50/60 Hz	$\theta \leq 55^\circ\text{C}$	180 A	200 A	–	–	–
	$\theta \leq 70^\circ\text{C}$	180 A	180 A	–	–	–
With conductor cross-sectional area		120 mm <sup>2</sup>	150 mm <sup>2</sup>	185 mm <sup>2</sup>	240 mm <sup>2</sup>	300 mm <sup>2</sup> (4)
<b>AC-3 Utilization category</b>						
For air temperature close to contactor $\theta \leq 55^\circ\text{C}$						
<b>I<sub>e</sub> / Max. rated operational current AC-3 (1)</b>						
	<b>220-230-240 V</b>	145 A	185 A	210 A	260 A	305 A
	<b>380-400 V</b>	145 A	185 A	210 A	260 A	305 A
	<b>415 V</b>	145 A	185 A	210 A	260 A	300 A
	<b>440 V</b>	145 A	185 A	210 A	240 A	280 A
	<b>500 V</b>	145 A	170 A	210 A	240 A	280 A
	<b>690 V</b>	120 A	170 A	210 A	220 A	280 A
	<b>1000 V</b>	80 A	95 A	–	–	–
<b>Rated operational power AC-3 (1)</b>						
	<b>220-230-240 V</b>	45 kW	55 kW	59 kW	80 kW	90 kW
	<b>380-400 V</b>	75 kW	90 kW	110 kW	140 kW	160 kW
	<b>415 V</b>	75 kW	90 kW	110 kW	140 kW	160 kW
	<b>440 V</b>	75 kW	90 kW	110 kW	140 kW	160 kW
	<b>500 V</b>	90 kW	110 kW	132 kW	180 kW	200 kW
	<b>690 V</b>	110 kW	132 kW	160 kW	200 kW	250 kW
	<b>1000 V</b>	110 kW	132 kW	–	–	–
<b>Rated making capacity AC-3</b>		10 x I <sub>e</sub> AC-3 acc. to IEC 60947-4-1				
<b>Rated breaking capacity AC-3</b>		8 x I <sub>e</sub> AC-3 acc. to IEC 60947-4-1				
<b>Short-circuit protection device for contactors</b>						
without thermal overload relay - Motor protection excluded (2)						
U <sub>e</sub> $\leq 500\text{ V AC}$ - gG type fuse		315 A	355 A	400 A	500 A	500 A
<b>Rated short-time withstand current I<sub>cw</sub></b>	<b>1 s</b>	1800 A	2000 A	2500 A	3500 A	3500 A
at 40 °C ambient temperature,	<b>10 s</b>	1200 A	1500 A	1700 A	2400 A	2400 A
in free air from a cold state	<b>30 s</b>	800 A	1000 A	1200 A	1500 A	1500 A
	<b>1 min</b>	600 A	800 A	1000 A	1100 A	1100 A
	<b>15 min</b>	280 A	320 A	400 A	500 A	500 A
<b>Maximum breaking capacity</b>						
cos $\varphi = 0.45$	<b>at 440 V</b>	1500 A	2000 A	2300 A	2600 A	3000 A
(cos $\varphi = 0.35$ for I <sub>e</sub> > 100 A)	<b>at 690 V</b>	1200 A	1600 A	2000 A	2400 A	2500 A
<b>Power dissipation per pole</b>	<b>I<sub>e</sub> / AC-1</b>	13 W	16 W	18 W	25 W	32 W
	<b>I<sub>e</sub> / AC-3</b>	5 W	8 W	9 W	14 W	18 W
<b>Max. electrical switching frequency</b>	<b>AC-1</b>	300 cycles/h			300 cycles/h	
	<b>AC-3</b>	300 cycles/h			300 cycles/h	
	<b>AC-2, AC-4</b>	150 cycles/h			150 cycles/h	



3-phase motors



1500 r.p.m. 50 Hz  
1800 r.p.m. 60 Hz  
3-phase motors

(1) For the corresponding kW/A or hp/A values of 1500 r.p.m, 50 Hz or 1800 r.p.m, 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".

(2) For the protection of motor starters against short circuits, see "Coordination with short-circuit protection devices".

(3) Conductors with preparation.

(4) Use terminal extension / enlargement pieces (LX 300 / LW 300).

# A9 ... A30 3-pole contactors

## Technical data

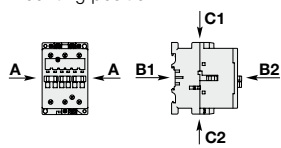
### Main pole - Utilization characteristics according to UL / NEMA / CSA

Contactor types	AC operated	A9	A12	A16	A26	A30
Standards		UL 508, CSA C22.2 N°14				
Max. operational voltage		600 V				
NEMA size		00	0	-	1	1P
NEMA continuous amp rating	Thermal current	9 A	18 A	-	27 A	36 A
NEMA maximum horse power ratings 1-phase, 60 Hz	115 V AC	1/3 hp	1 hp	-	2 hp	3 hp
	230 V AC	1 hp	2 hp	-	3 hp	5 hp
NEMA maximum horse power ratings 3-phase, 60 Hz	200 V AC	1-1/2 hp	3 hp	-	7-1/2 hp	-
	230 V AC	1-1/2 hp	3 hp	-	7-1/2 hp	-
	460 V AC	1-1/2 hp	5 hp	-	10 hp	-
	575 V AC	2 hp	5 hp	-	10 hp	-
UL / CSA general use rating 600 V AC		21 A	25 A	30 A	40 A	50 A
With conductor cross-sectional area		AWG 10				
UL / CSA maximum 1-phase motor rating						
Full load current	120 V AC	9.8 A	13.8 A	16 A	28 A	34 A
	240 V AC	12 A	12 A	17 A	24 A	40 A
Horse power rating	120 V AC	1/2 hp	3/4 hp	1 hp	2 hp	3 hp
	240 V AC	2 hp	2 hp	3 hp	5 hp	7.5 hp
UL / CSA maximum 3-phase motor rating						
Full load current (1)	200-208 V AC	7.8 A	11 A	17.5 A	25.3 A	32.2 A
	220-240 V AC	6.8 A	9.6 A	15.2 A	28 A	28 A
	440-480 V AC	7.6 A	11 A	14 A	27 A	34 A
	550-600 V AC	9 A	11 A	17 A	27 A	32 A
Horse power rating (1)	200-208 V AC	2 hp	3 hp	5 hp	7.5 hp	10 hp
	220-240 V AC	2 hp	3 hp	5 hp	10 hp	10 hp
	440-480 V AC	5 hp	7.5 hp	10 hp	20 hp	25 hp
	550-600 V AC	7.5 hp	10 hp	15 hp	25 hp	30 hp
Short-circuit protection device for contactors without thermal overload relay - Motor protection excluded						
Fuse rating		35 A	35 A	60 A	90 A	150 A
Fuse type, 600 V		FRS-R				
Max. electrical switching frequency						
For general use		600 cycles/h				
For motor use		1200 cycles/h				

(1) For the corresponding kW/A or hp/A values of 1500 r.p.m, 50 Hz or 1800 r.p.m, 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".

### General technical data

Contactor types	AC operated	A9	A12	A16	A26	A30
Rated insulation voltage $U_i$		1000 V				
acc. to IEC 60947-4-1		600 V				
acc. to UL / CSA		8 kV				
Rated impulse withstand voltage $U_{imp}$		8 kV				
Ambient air temperature close to contactor						
Operation	Fitted with thermal overload relay	-25...+55 °C				
	Without thermal overload relay	-40...+70 °C				
Storage		-60...+80 °C				
Climatic withstand		acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II				
Maximum operating altitude (without derating)		3000 m				
Mechanical durability						
Number of operating cycles		10 millions operating cycles				
Max. switching frequency		3600 cycles/h				
Shock withstand						
acc. to IEC 60068-2-27 and EN 60068-2-27						
Mounting position 1						
	Shock direction	1/2 sinusoidal shock for 11 ms: no change in contact position, closed or open position				
	A	20 g				
	B1	10 g closed position / 5 g open position				
	B2	15 g				
	C1	20 g				
	C2	20 g				



# A40 ... A110 3-pole contactors

## Technical data

### Main pole - Utilization characteristics according to UL / NEMA / CSA

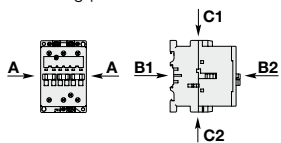
Contactor types	AC operated	A40	A50	A63	A75	A95	A110
Standards		UL 508, CSA C22.2 N°14					
Max. operational voltage		600 V					
NEMA size		-	2	-	3	-	-
NEMA continuous amp rating	Thermal current	-	45 A	-	90 A	-	-
NEMA maximum horse power ratings							
1-phase, 60 Hz	115 V AC	-	3 hp	-	-	-	-
	230 V AC	-	7-1/2	-	-	-	-
NEMA maximum horse power ratings							
3-phase, 60 Hz	200 V AC	-	10 hp	-	25 hp	-	-
	230 V AC	-	15 hp	-	30 hp	-	-
	460 V AC	-	25 hp	-	50 hp	-	-
	575 V AC	-	25 hp	-	50 hp	-	-
UL / CSA general use rating							
600 V AC		60 A	80 A	90 A	105 A	125 A	150 A
With conductor cross-sectional area		AWG 6	AWG 4	AWG 3	AWG 2	AWG 1	AWG 1/0
UL / CSA maximum 1-phase motor rating							
Full load current	120 V AC	34 A	34 A	56 A	80 A	80 A	100 A
	240 V AC	40 A	40 A	50 A	68 A	88 A	110 A
Horse power rating	120 V AC	3 hp	3 hp	5 hp	7.5 hp	7.5 hp	10 hp
	240 V AC	7.5 hp	7.5 hp	10 hp	15 hp	20 hp	25 hp
UL / CSA maximum 3-phase motor rating							
Full load current (1)	200-208 V AC	32.2 A	48.3 A	62.1 A	78.2 A	92 A	92 A
	220-240 V AC	42 A	54 A	68 A	80 A	80 A	104 A
	440-480 V AC	40 A	52 A	77 A	77 A	77 A	96 A
	550-600 V AC	41 A	52 A	77 A	77 A	77 A	99 A
Horse power rating (1)	200-208 V AC	10 hp	15 hp	20 hp	25 hp	30 hp	30 hp
	220-240 V AC	15 hp	20 hp	25 hp	30 hp	30 hp	40 hp
	440-480 V AC	30 hp	40 hp	60 hp	60 hp	60 hp	75 hp
	550-600 V AC	40 hp	50 hp	75 hp	75 hp	75 hp	100 hp
Short-circuit protection device for contactors							
without thermal overload relay - Motor protection excluded							
Fuse rating		150 A	175 A	200 A	200 A	200 A	200 A
Fuse type, 600 V		FRS-R		J			
Max. electrical switching frequency							
For general use		600 cycles/h				300 cycles/h	
For motor use		1200 cycles/h	600 cycles/h		300 cycles/h		

(1) For the corresponding kW/A or hp/A values of 1500 r.p.m, 50 Hz or 1800 r.p.m, 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".

### General technical data

Contactor types	AC operated	A40	A50	A63	A75	A95	A110
Rated insulation voltage Ui		1000 V					
acc. to IEC 60947-4-1		600 V					
acc. to UL / CSA		8 kV					
Rated impulse withstand voltage Uimp.		8 kV					
Ambient air temperature close to contactor							
Operation	Fitted with thermal overload relay	-25...+55 °C					
	Without thermal overload relay	-40...+70 °C					
Storage		-60...+80 °C				-40...+70 °C	
Climatic withstand		acc. to IEC 60068-2-30 and 60068-2-11 UTE C 63-100 specification II				acc. to IEC 60068-2-30	
Maximum operating altitude (without derating)		3000 m					
Mechanical durability							
Number of operating cycles		10 millions operating cycles					
Max. switching frequency		3600 cycles/h					
Shock withstand							
acc. to IEC 60068-2-27 and EN 60068-2-27							
Mounting position 1							
	Shock direction	1/2 sinusoidal shock for 11 ms: no change in contact position, closed or open position (2)					
	A	20 g					
	B1	10 g closed position / 5 g open position					
	B2	15 g					
	C1	20 g					
	C2	20 g					

(2) These values are not valid for rail mounting with contactors A95 ... A110.



# A145 ... A300 3-pole contactors

## Technical data

### Main pole - Utilization characteristics according to UL / NEMA / CSA

Contactor types	AC operated	A145	A185	A210	A260	A300
Standards		UL 508, CSA C22.2 N°14				
Maximum operational voltage		600 V				
NEMA size		4	-	-	5	-
NEMA maximum horse power ratings						
1-phase, 60 Hz	115 V AC	-	-	-	-	-
	230 V AC	-	-	-	-	-
NEMA maximum horse power ratings						
3-phase, 60 Hz	200 V AC	40 hp			75 hp	
	230 V AC	50 hp			100 hp	
	460 V AC	100 hp			200 hp	
	575 V AC	200 hp			200 hp	
UL / CSA general use rating						
600 V AC		230 A	250 A	300 A	350 A	400 A
UL / CSA maximum 1-phase motor rating						
Full load current	240 V AC	-	-	-	-	-
Horse power rating	240 V AC	-	-	-	-	-
UL / CSA maximum 3-phase motor rating						
Full load current (1)	200-208 V AC	119.6 A	149.5 A	166.8 A	220.8 A	285.2 A
	220-240 V AC	130 A	145 A	192 A	248 A	248 A
	440-480 V AC	124 A	156 A	180 A	240 A	302 A
	550-600 V AC	125 A	144 A	192 A	242 A	289 A
Horse power rating (1)	200-208 V AC	40 hp	50 hp	60 hp	75 hp	100 hp
	220-240 V AC	50 hp	60 hp	75 hp	100 hp	100 hp
	440-480 V AC	100 hp	125 hp	150 hp	200 hp	250 hp
	550-600 V AC	125 hp	150 hp	200 hp	250 hp	300 hp
Short-circuit protection device for contactors						
without thermal overload relay - Motor protection excluded						
Fuse rating		300 A	400 A	800 A	800 A	800 A
Fuse type, 600 V		J/K5				
Maximum electrical switching frequency						
For general use		300 cycles/h				
For motor use		300 cycles/h				

(1) For the corresponding kW/A or hp/A values of 1500 r.p.m, 50 Hz or 1800 r.p.m, 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".

### General technical data

Contactor types	AC operated	A145	A185	A210	A260	A300
Rated insulation voltage $U_i$						
acc. to IEC 60947-4-1		1000 V				
acc. to UL / CSA		600 V				
Rated impulse withstand voltage $U_{imp}$		8 kV				
Ambient air temperature close to contactor						
Operation Fitted with thermal overload relay		-25 to +55 °C				
Storage		-40 to +70 °C				
Climatic withstand		acc. to IEC 60068-2-30				
Maximum operating altitude (without derating)		3000 m				
Mechanical durability						
Number of operating cycles		5 millions operating cycles				
Max. switching frequency		3600 cycles/h				
Shock withstand						
acc. to IEC 60068-2-27 and EN 60068-2-27						
Mounting position 1						
Shock direction		1/2 sinusoidal shock for 30 ms: no change in contact position, closed or open position				
A		5 g				
B1		5 g				
B2		5 g				
C1		5 g				
C2		5 g				

