





Product type designation	Product designation			Power contactor
Number of poles         Nr.         3           Rated insulation voltage Ui IEC/EN         V         690           Rated insulation voltage Withstand voltage Uimp         kV         6           Operational frequency         min         Hz         25           max         Hz         400         LV           IEC Conventional free air thermal current Ith         A         28           Operational current Ie         AC-1 (≤40°C)         A         28           AC-1 (55°C)         A         23         AC-1 (570°C)         A         20           AC-3 (5400 V 55°C)         A         23         AC-1 (570°C)         A         20           AC-3 (5400 V 55°C)         A         23         AC-1 (570°C)         A         20           AC-3 (5400 V 55°C)         A         23         AC-1 (570°C)         A         20           AC-3 (5400 V 55°C)         A         23         AC-1 (570°C)         A         12           Rated operational power AC-3 (T≤55°C)         230V kW         5.         5         500V kW         5           Rated operational power AC-1 (T≤40°C)         230V kW         5         5         500V kW         5           Rated operational power AC-1 (T≤40°C)         2				BF12
Rated insulation voltage U IEC/EN         V         690           Rated impulse withstand voltage Uimp         kV         6           Operational frequency         min         Hz         25           iEC Conventional free air thermal current Ith         A         28           Operational current Ie         AC-1 (≤40°C)         A         28           AC-1 (≤70°C)         A         20           AC-3 (≤440V ≤55°C)         A         12           AC-4 (400V)         A         7.9           Rated operational power AC-3 (T≤55°C)         230V         kW         5.7           415V         kW         5.2         440V         kW         5.5           500V         kW         5.5         500V         kW         5.5           Rated operational power AC-1 (T≤40°C)         230V         kW         5.           Rated operational power AC-1 (T≤40°C)         230V         kW         10           400V         kW         3.2         40V         kW         2.3           Rated operational power AC-1 (T≤40°C)         230V         kW         10         40V         kW         5.5           500V         kW         2.2         500V         kW         3.2				•
Rated impulse withstand voltage Uimp	•			
Operational frequency         min max bit				
Fig. 25			kV	6
EC Conventional free air thermal current lth	Operational frequency			
EC Conventional free air thermal current lith				
Operational current le         AC-1 (≤40°C)       A       28         AC-1 (≤55°C)       A       23         AC-1 (≤70°C)       A       20         AC-3 (≤440V ≤55°C)       A       12         AC-4 (400V)       A       7.9         Rated operational power AC-3 (T≤55°C)         230V       kW       3.2         400V       kW       5.7         415V       kW       6.2         440V       kW       5.5         500V       kW       5         809V       kW       5         809V       kW       10         400V       kW       18         500V       kW       23         690V       kW       32         IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series         \$224V       A       17         48V       A       15         75V       A       18         110V       A       6         220V       A       -         IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series         \$224V       A       20         75V		max		
AC-1 (≤40°C)			A	28
AC-1 (≤55°C)	Operational current le		_	
AC-1 (≤70°C)				
AC-3 (≤440V ≤55°C)		,		
Rated operational power AC-3 (T≤55°C)   230V kW 3.2   400V kW 5.7   415V kW 6.2   444V kW 5.5   500V kW 1.0   400V kW 1.8   500V kW 2.3   690V kW 3.2   6		,		
Rated operational power AC-3 (T≤55°C)  230V kW 3.2 400V kW 5.7 415V kW 6.2 440V kW 5.5 500V kW 5.6 500V kW 5.6 690V kW 5.6 690V kW 10 400V kW 18 500V kW 23 690V kW 32  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  \$\frac{\frac{2}{4}}{4}}{4} \frac{2}{4} \frac{2}{		•		
230V   kW   3.2   400V   kW   5.7   415V   kW   6.2   440V   kW   5.5   500V   kW   5.5   500V   kW   5   500V   kW   18   500V   kW   18   500V   kW   32   500V		AC-4 (400V)	A	7.9
A00V   kW   5.7     415V   kW   6.2     4440V   kW   5.5     500V   kW   5     690V   kW   5     690V   kW   5     700V   kW   5     690V   kW   5     700V   kW   10     400V   kW   18     500V   kW   23     690V   kW   32     180   180   180     690V   kW   32     180   180   180     690V   180     690V   180   180	Rated operational power AC-3 (T≤55°C)			
415V				
A440V   kW   5.5				
Soov   kW   5   690V   kW   5				
Rated operational power AC-1 (T≤40°C)   230V   kW   10   400V   kW   18   500V   kW   23   690V   kW   32     224V   A   15   75V   A   13   110V   A   6   220V   A   20   48V   A   20   48V   A   13   110V   A   18   1				
Rated operational power AC-1 (T≤40°C)  230V kW 10 400V kW 18 500V kW 23 690V kW 32  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 17 48V A 15 75V A 13 110V A 6 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series  ≤24V A 20 48V A 20 75V A 18 110V A 13 220V A 1  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 20 48V A 20 75V A 18 110V A 13 220V A 1				
		690V	KVV	5
	Rated operational power AC-1 (T≤40°C)			
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series   S24V   A   17   48V   A   15   75V   A   13   110V   A   6   220V   A   -      IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series   S24V   A   20   48V   A   20   75V   A   18   110V   A   18   110V   A   13   220V   A   1      IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series   S24V   A   20   220V   A   1      IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series   S24V   A   22   48V   A   22   48V   A   22   75V   A   20   20   48V   A   22   75V   A   20   48V				
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series   ≤24V				
SEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series   S24V				
		690V	KVV	32
	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V   A   13   110V   A   6   220V   A   -				
110V   A   6   220V   A   -				
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series   S24V   A   20				
IEC max current le in DC1 with L/R $\leq$ 1ms with 2 poles in series   $\leq$ 24V   A   20   48V   A   20   75V   A   18   110V   A   13   220V   A   1				6
	150 H. J. BOA W. J. B. J.	220V	A	_
	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
EC max current le in DC1 with L/R $\leq$ 1ms with 3 poles in series   $\leq$ 24V A 22 48V A 22 75V A 20				
IEC max current le in DC1 with L/R $\leq$ 1ms with 3 poles in series $ \leq 24V \qquad A \qquad 22 \\ 48V \qquad A \qquad 22 \\ 75V \qquad A \qquad 20 $				
≤24V A 22 48V A 22 75V A 20		220V	A	1
48V A 22 75V A 20	IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
75V A 20				
110V A 16				
		110V	Α	16





	220V	Α	11
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	20
	48V	Α	20
	75V	Α	20
	110V	Α	16
	220V	Α	12
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
·	≤24V	Α	12
	48V	Α	11
	75V	Α	10
	110V	Α	2
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
The max current le in boo-boo with bit 2 forts with 2 poles in series	≤24V	Α	15
	48V	A	13
	46 V 75 V		13
		A	
	110V	A	8
150	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	.= :		4.0
	≤24V	Α	18
	48V	Α	18
	75V	Α	15
	110V	Α	12
	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	15
	48V	Α	15
	75V	Α	15
	110V	Α	16
	220V	Α	7
Short-time allowable current for 10s (IEC/EN60947-1)		Α	150
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	12
Making capacity (RMS value)		Α	120
Breaking capacity at voltage			
J. Safe and J. Saf	440V	Α	96
	500V	A	96
	690V	A	94
Resistance per note (average value)	090 v	mΩ	2.5
Resistance per pole (average value)		11177	۷.ن
Power dissipation per pole (average value)	141	147	2
	Ith	W	2
Till to die teen et te teen de	AC-3	W	0.4
Tightening torque for terminals			4 =
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	lbin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8





Max number of wires simultaneously connectable	max	lbin	0.74
		Nr.	2
Conductor section			
AWG/Kcmil			4.0
Florible w./s has conducted a setting	max		10
Flexible w/o lug conductor section	min	mama <sup>2</sup>	4
	min	mm² mm²	1 6
Flexible c/w lug conductor section	max	ШШ	O
r lexible 6/w lug corrudctor section	min	mm²	1
	max	mm²	4
Flexible with insulated spade lug conductor section	тах		•
Tioxible with inculated opade tag contactor coolien	min	mm²	1
	max	mm²	4
			IP20 when
Power terminal protection according to IEC/EN 60529			properly wired
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight		g	362
Conductor section		9	
AWG/kcmil conductor section			
7 (17 C) Normal Conduction Coolies	max		10
Auxiliary contact characteristics			
Thermal current Ith		Α	10
IEC/EN 60947-5-1 designation			A600 - P600
Operating current AC15			
	230V	Α	3
	400V	Α	1.9
	500V	Α	1.4
Operating current DC12			
	110V	Α	5.7
Operating current DC13			
Operating current DC13	24V	А	5.7
Operating current DC13	48V	Α	2.9
Operating current DC13	48V 60V	A A	2.9 2.3
Operating current DC13	48V 60V 110V	A A A	2.9 2.3 1.25
Operating current DC13	48V 60V 110V 125V	A A A	2.9 2.3 1.25 1.1
Operating current DC13	48V 60V 110V 125V 220V	A A A A	2.9 2.3 1.25 1.1 0.55
	48V 60V 110V 125V	A A A	2.9 2.3 1.25 1.1
Operations	48V 60V 110V 125V 220V	A A A A	2.9 2.3 1.25 1.1 0.55 0.2
Operations Mechanical life	48V 60V 110V 125V 220V	A A A A A cycles	2.9 2.3 1.25 1.1 0.55 0.2
Operations Mechanical life Electrical life	48V 60V 110V 125V 220V	A A A A	2.9 2.3 1.25 1.1 0.55 0.2
Operations Mechanical life Electrical life Safety related data	48V 60V 110V 125V 220V	A A A A A cycles	2.9 2.3 1.25 1.1 0.55 0.2
Operations Mechanical life Electrical life	48V 60V 110V 125V 220V 600V	A A A A A Cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000
Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1	48V 60V 110V 125V 220V 600V	A A A A A Cycles cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000
Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mech	48V 60V 110V 125V 220V 600V	A A A A A Cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000 200000000
Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1	48V 60V 110V 125V 220V 600V	A A A A A Cycles cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000



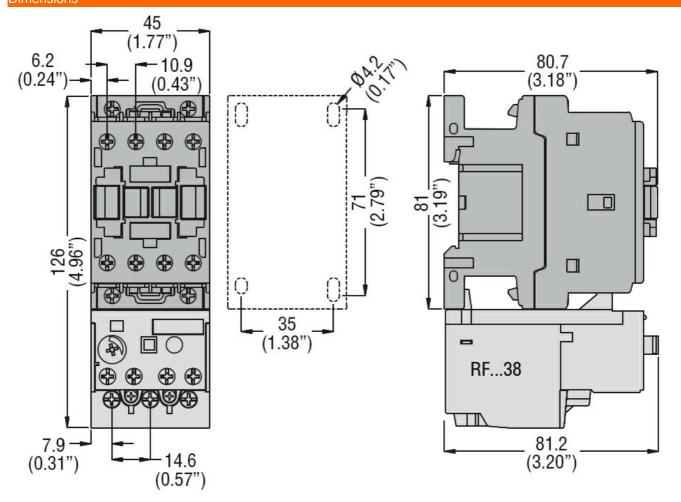


Rated AC voltage at 60Hz				V	230
AC operating voltage					
of 6	60Hz coil powered at				
		pick-up			
			min		80
			max	%Us	110
		drop-out		0/11	
			min		20
A O	+ 0000		max	%Us	55
AC average coil consumption		0011-			
OT C	60Hz coil powered at	60HZ	in much	١/٨	75
			in-rush		75
Dissipation at holding <20°C	2 E0U=		holding	W	9
Dissipation at holding ≤20°C	> 50HZ			VV	2.5
Max cycles frequency				ovoloo/b	2600
Mechanical operation				cycles/h	3600
Operating times  Average time for Us control					
in A					
III P		Closing NO			
		Closing NO	min	ms	8
			max		24
		Opening NO	max	1113	24
		Opening 140	min	ms	10
			max		20
		Closing NC	max		20
		0.00g 0	min	ms	14
			max		28
		Opening NC			
			min	ms	7
			max	ms	18
UL technical data					
Full-load current (FLA) for the	hree-phase AC moto	r			
			at 480V		11
			at 600V	Α	11
Yielded mechanical perform					
for	single-phase AC mo	tor			
			110/120V		1
			230V	HP	2
for	three-phase AC mot	or			_
			200/208V		5
			220/230V		5
			460/480V		7.5
0			575/600V	HP	10
General USE	-44				
Cor	ntactor		4.0	Δ.	0.0
	illiam, agreta et		AC current	A	28
Aux	kiliary contacts		A 🔿	\ /	000
			AC voltage		600
			AC current		10
			DC voltage		250
Chart airquit protection from	6001/		DC current	A	1
Short-circuit protection fuse					
Hig	h fault				





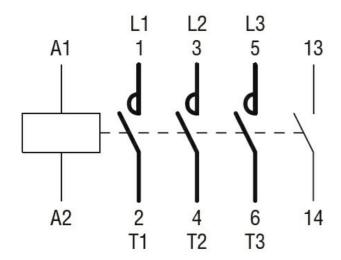
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
Sta	ndard fault			
		Short circuit current	kA	5
		Fuse rating	Α	70
Contact rating of auxiliary co	ontacts according to UL			A600 - P600
Ambient conditions				
Temperature				
Ope	erating temperature			
		min	°C	-50
		max	°C	70
Sto	rage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
Dimensions				



Wiring diagrams

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 60HZ, 230VAC, 1NO AUXILIARY CONTACT



#### Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

#### ETIM classification

**ETIM 8.0** 

EC000066 -Power contactor, AC switching