



Contact characteristics Number of poles Nr. 3 Rated insulation voltage Ui IEC/EN V 690 Rated insulation voltage Uimp KV 6 Operational frequency min Hz 25 max Hz 400 IEC Conventional frequency min Hz 200 IEC Conventional frequency Min Hz 200 IEC Conventional frequency Min Hz 200 IEC Conventional current Ith A 32 Operational current Ie AC-1 (≤40°C) A 32 AC-1 (≤55°C) A 26 AC-1 (≤55°C) A 23 AC-3 (≤4400 ≤55°C) A 18 AC-4 (4000) A 8.5 AC-3 (≤4400 ≤55°C) A 18 AC-4 (4000) A 8.5 AC-4 (4000) A 8.5 Rated operational power AC-3 (T≤55°C) A150	Product designation Product type designation			Power contactor BF18
Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min Hz 25 imax Hz 400 400 IEC Conventional free air thermal current Ith A 32 Operational current Ie AC-1 (≤40°C) A 26 AC-1 (≤55°C) A 26 AC-1 (≤55°C) A 28 AC-3 (≤440V ≤55°C) A 18 AC-4 (400V) A 8.5 Rated operational power AC-3 (T≤55°C) 230V kW 4 400V kW 9 440V kW 9 500V kW 10 690V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 10 690V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 10 690V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 12 40V kW 21 500V				
Rated impulse withstand voltage Ulmp	Number of poles		Nr.	3
The conventional frequency min max Hz by 400 Hz by 400 IEC Conventional free air thermal current lth A 32 Operational current le AC-1 (40°C) A 32 AC-1 (555°C) A 26 AC-1 (570°C) A 23 AC-3 (4400°V 555°C) A 18 AC-3 (4400°V 555°C) A 18 AC-3 (4400°V 555°C) Rated operational power AC-3 (T≤55°C) 230V kW 4 A000 kW 7.5 A15V kW 9 A400 kW 7.5 A15V kW 9 A400 kW 7.5 A15V kW 9 A400 kW 10 A10 A100 kW 10 A10 A10 A10 A10 A10 A10 A10 A10 A10	Rated insulation voltage Ui IEC/EN		V	690
Min Hz 25 max Hz 400 EC Conventional free air thermal current lith	Rated impulse withstand voltage Uimp		kV	6
EC Conventional free air thermal current Ith	Operational frequency			
ECC Conventional free air thermal current Ith		min	Hz	25
Operational current le AC-1 (≤40°C) A 32 AC-1 (≤55°C) A 26 AC-1 (≤70°C) A 23 AC-3 (≤440V ≤55°C) A 18 AC-4 (400V) A 8.5 Rated operational power AC-3 (T≤55°C) 230V kW 4 440V kW 9 440V kW 9 440V kW 9 440V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 26 690V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 17 48V A 20 75V A 20 110V A 13 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 20		max	Hz	400
AC-1 (≤40°C) A 32 AC-1 (≤55°C) A 26 AC-1 (≤70°C) A 23 AC-3 (≤440V ≤55°C) A 18 AC-4 (400V) A 8.5 Rated operational power AC-3 (T≤55°C) 230V kW 4 400V kW 7.5 415V kW 9 440V kW 9 500V kW 10 690V kW 10 690V kW 10 690V kW 21 500V kW 21 500V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 17 48V A 15 75V A 15 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 20 110V A 13 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	IEC Conventional free air thermal current Ith		Α	32
AC-1 (S55°C)	Operational current le			
AC-1 (≤70°C) A 23 AC-3 (≤440V ≤55°C) A 18 AC-4 (400V) A 8.5 Rated operational power AC-3 (T≤55°C) 230V kW 4 400V kW 7.5 415V kW 9 440V kW 9 500V kW 10 690V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 12 440V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 17 48V A 15 75V A 15 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 20 110V A 13 220V A 1 110V A 20 48V A 20 75V A 20 48V A 20 75V A 20 110V A 13 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤40°C)	Α	32
AC-3 (≤440V ≤55°C) A 18 AC-4 (400V) A 8.5 Rated operational power AC-3 (T≤55°C) 230V kW 4 400V kW 7.5 415V kW 9 440V kW 10 690V kW 10 Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 15 75V A 15 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 13 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 20 110V A 13 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤55°C)	Α	26
Rated operational power AC-3 (T≤55°C) 230V kW 4 4 400V kW 7.5		AC-1 (≤70°C)	Α	23
Rated operational power AC-3 (T≤55°C) 230V kW 4 400V kW 7.5 415V kW 9 440V kW 9 500V kW 10 690V kW 10 Rated operational power AC-1 (T≤40°C) Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 17 48V A 15 75V A 15 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 48V A 20 110V A 13 220V A 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-3 (≤440V ≤55°C)	Α	18
230V kW 4 400V kW 7.5 415V kW 9 446V kW 9 500V kW 10 690V kW 10 690V kW 10 690V kW 10 690V kW 21 500V kW 26 690V kW 36 690V kW 30 690V		AC-4 (400V)	Α	8.5
400V kW 7.5 415V kW 9 440V kW 9 500V kW 10 690V kW 10 690V kW 10 690V kW 10 690V kW 21 500V kW 26 690V kW 36 600V kW 30 600V	Rated operational power AC-3 (T≤55°C)			
		230V	kW	4
A40V kW 9 500V kW 10 690V kW 12 400V kW 21 500V kW 26 690V kW 36 kW 36 kW 36 kW 36 kW 36 kW 36 kW		400V	kW	7.5
Soov kW 10 690V kW 10		415V	kW	9
Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 26 690V kW 36		440V	kW	9
Rated operational power AC-1 (T≤40°C) 230V kW 12 400V kW 21 500V kW 26 690V kW 36 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 17 48V A 15 75V A 15 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 20 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 20 110V A 13 220V A 1		500V	kW	10
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		690V	kW	10
	Rated operational power AC-1 (T≤40°C)			
S00V kW 26 690V kW 36		230V	kW	12
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V		400V	kW	21
Section Sec		500V	kW	26
		690V	kW	36
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V A 15 110V A 6 220V A -		≤24V	Α	17
110V A 6 220V A -			Α	15
EC max current le in DC1 with L/R \leq 1ms with 2 poles in series \leq 24V A 20 48V A 20 75V A 20 110V A 13 220V A 1			Α	
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V		110V	Α	6
		220V	Α	_
	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
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	22
	48V	Α	22
	75V	Α	20
	110V	Α	18
	220V	Α	13
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
·	≤24V	Α	12
	48V	Α	11
	75V	Α	11
	110V	Α	2
	220V	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
The max current to in 500-500 with E/N = 10m3 with 2 poles in series	≤24V	Α	15
	48V	A	
	48 V 75 V		13
		A	13
	110V	A	8
150	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	-0.01		4.0
	≤24V	A	18
	48V	Α	18
	75V	Α	16
	110V	Α	12
	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	13
	220V	Α	8
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	20
Making capacity (RMS value)	, ,	Α	180
Breaking capacity at voltage			
	440V	Α	144
	500V	A	120
	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	107	2.0
	Ith	W	2.6
Till to die to en a forte estado	AC-3	W	0.8
Tightening torque for terminals			4.5
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8



		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	ANAC/Komil			
	AWG/Kcmil	may		10
	Florible w/e lug conductor poetion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	Παχ	111111	0
	rickible of wind defination section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			•
		min	mm²	1
		max	mm²	4
				IP20 when
Power terminal protec	tion according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	496
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact chara	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de	-			A600 - P600
Operating current AC1	15		_	
		230V	A	3
		400V	A	1.9
0	10	500V	Α	1.4
Operating current DC	12	440)/		
0	10	110V	Α	5.7
Operating current DC	13	0.41/	Δ.	
		24V	Α	5.7
		401/	Λ.	
		48V	A	2.9
		60V	Α	2.3
		60V 110V	A A	2.3 1.25
		60V 110V 125V	A A A	2.3 1.25 1.1
		60V 110V 125V 220V	A A A	2.3 1.25 1.1 0.55
Operations		60V 110V 125V	A A A	2.3 1.25 1.1
•		60V 110V 125V 220V	A A A A	2.3 1.25 1.1 0.55 0.2
Mechanical life		60V 110V 125V 220V	A A A A Cycles	2.3 1.25 1.1 0.55 0.2
Mechanical life Electrical life		60V 110V 125V 220V	A A A A	2.3 1.25 1.1 0.55 0.2
Mechanical life Electrical life Safety related data	Od according to EN/ISO 13480-1	60V 110V 125V 220V	A A A A Cycles	2.3 1.25 1.1 0.55 0.2
Mechanical life Electrical life Safety related data	0d according to EN/ISO 13489-1	60V 110V 125V 220V 600V	A A A A Cycles	2.3 1.25 1.1 0.55 0.2 20000000 1600000
Mechanical life Electrical life Safety related data		60V 110V 125V 220V 600V	A A A A Cycles cycles	2.3 1.25 1.1 0.55 0.2 20000000 1600000
Mechanical life Electrical life Safety related data Performance level B1	me	60V 110V 125V 220V 600V	A A A A Cycles	2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 20000000
		60V 110V 125V 220V 600V	A A A A Cycles cycles	2.3 1.25 1.1 0.55 0.2 20000000 1600000

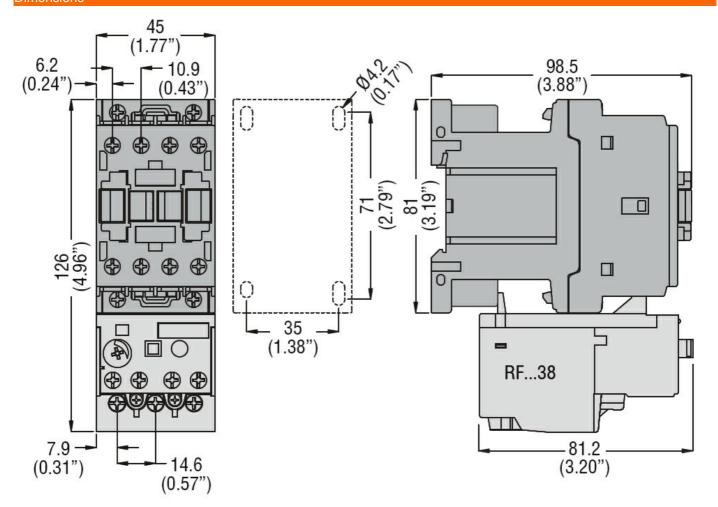


DC rated central valtes	70			M	110
DC rated control voltage DC operating voltage	ge			V	110
DC operating voltage	niak un				
	pick-up		min	%Us	70
			max	%Us	125
	drop-out		παλ	7003	120
	drop out		min	%Us	10
			max	%Us	40
Average coil consump	tion ≤20°C			7000	
			in-rush	W	5.4
			holding	W	5.4
Max cycles frequency			J		
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co	ontrol				
	in AC				
		Closing NO			
			min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
			max	ms	20
		Closing NC			
			min	ms	14
			max	ms	28
		Opening NC			
			min	ms	7
			max	ms	18
	in DC				
		Closing NO			
			min	ms	54
			max	ms	66
		Opening NO			
			min	ms	14
			max	ms	17
UL technical data					
Full-load current (FLA)	for three-phase AC	motor			4.4
			at 480V	A	14
VC-11-1-2-2-2			at 600V	Α	17
Yielded mechanical pe		0.000			
	for single-phase A	AC motor	44044001		4
			110/120V	HP	1
	<u></u>	0	230V	HP	3
	for three-phase A	C motor	000/000/	LID	F
			200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
General USE			575/600V	HP	15
General USE	Contactor				
	Contactor		AC 011880-1	٨	22
	Auvilian, contacts		AC current	Α	32
	Auxiliary contacts		AC valtage	17	600
			AC voltage AC current	V A	600 10
			AC CUITERI	^	ı U

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 110VDC, 1NO AUXILIARY CONTACT

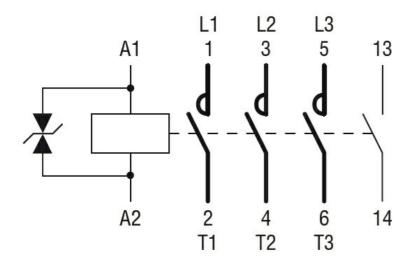
		DC voltage	V	250
		DC current	Α	1
Short-circuit protect	ion fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	80
Contact rating of auxiliary contacts according to UL				A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ction			
Pollution degree				3
Dimensions				



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 110VDC, 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