



Product designation			Power contactor
Product type designation			BF50
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	90
Operational current le			
	AC-1 (≤40°C)	Α	90
	AC-1 (≤55°C)	Α	75
	AC-1 (≤70°C)	Α	65
	AC-3 (≤440V ≤55°C)	Α	50
	AC-4 (400V)	Α	28
Rated operational power AC-3 (T≤55°C)			
	230V	kW	15
	400V	kW	22
	415V	kW	30
	440V	kW	30
	500V	kW	30
	690V	kW	37
	1000V	kW	22
Rated operational power AC-1 (T≤40°C)			
	230V	kW	34
	400V	kW	59
	500V	kW	74
	690V	kW	102
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	45
	48V	Α	40
	75V	Α	40
	110V	Α	8
	220V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	60
	48V	Α	60
	75V	Α	60
	110V	Α	50
	220V	A	7
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	60
	48V	Α	60
	75V	Α	60



	110V	Α	55
	220V	Α	75
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	60
	48V	Α	60
	75V	Α	60
	110V	Α	60
	220V	Α	90
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	30
	48V	Α	25
	75V	Α	22
	110V	Α	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
·	≤24V	Α	35
	48V	Α	35
	75V	Α	30
	110V	Α	25
	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		<u> </u>	
	≤24V	Α	50
	48V	Α	50
	75V	Α	45
	110V	Α	30
	220V	A	40
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	2201		
TEO MAX GUITOR TO MEDOO DOO WILL ETY = TOMO WILL 4 POICE III SONES	≤24V	Α	55
	48V	Α	55
	75V	Α	55
	110V	A	45
	220V	Α	50
Short-time allowable current for 10s (IEC/EN60947-1)	2201	A	400
Protection fuse			400
r rotection ruse	gG (IEC)	Α	100
	aM (IEC)	A	50
Making capacity (RMS value)	aivi (IEC)	A	500
		A	500
Breaking capacity at voltage	4401/	٨	400
	440V	A	400
	500V	A	352
Decistance per pela (everage value)	690V	A	312
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)	1.1	14.	٥.5
	Ith	W	6.5
<del></del>	AC3	W	2
Tightening torque for terminals	_		
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1





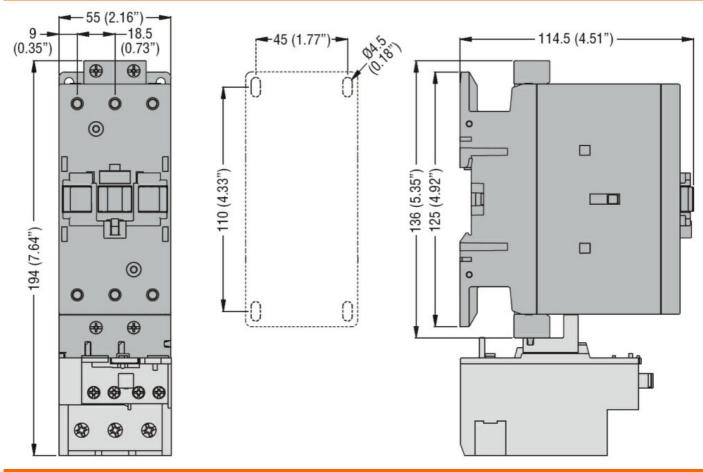
		min	Ibin	0.8
		max	lbin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AWG/Kcmil			
	AWG/Remii	max		2
	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section		2	
		min	mm² mm²	1.5 35
Power terminal protect	ction according to IEC/EN 60529	max	ишс	IP20 front
Mechanical features	ction according to 120/214 00020			II 20 IIOIII
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1060
Conductor section				
	AWG/kcmil conductor section			_
Operations		max		2
Mechanical life			cycles	15000000
Electrical life			cycles	1400000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			
		rated load	cycles	1400000
		mechanical load	cycles	15000000
	ing to IEC/EN 609474-4-1			yes
EMC compatibility  AC coil operating				yes
Rated AC voltage at 5	50/60Hz 60Hz			
rated 7.0 vehage at e	75,651 12, 651 12	min	V	20
		max	V	48
Rated AC voltage at 5	50/60Hz		V	24
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	0/ I Io	95 Ho min
	drop-out	min	%Us	85 Us min
	diop out	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz		,,,,,	
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out		0/11-	<70 Ll
AC average coil consi	umption at 20°C	max	%Us	≤70 Us min
AC average con const	of 50/60Hz coil powered at 50Hz			
	or 50/001 12 con powered at 50112	in-rush	VA	35120
		holding	VA	1.53.7
		9		



	of FO/COLLT poil	noward at COUT			
	01 50/6002 0011	powered at 60Hz	in-rush	VA	35120
			holding	VA	1.53.7
Dissipation at holding :			riolding	W	12.5
DC coil operating	<u> </u>			VV	12.0
DC rated control voltage	ne.				
Do rated control voltaç	<del>Je</del>		min	V	20
			max	V	48
DC rated control voltage			IIIdx	V	24
DC operating voltage	<del>Je</del>			V	24
Do operating voltage	pick-up				
	pick-up		min	%Us	80 Us min
			max	%Us	110 Us max
	drop-out		max	7003	110 03 max
	drop out		max	%Us	≤70 Us min
Average coil consump	tion <20°C		IIIdx	/003	<u> </u>
Average con consump	HOH ZZU U		in-rush	W	2368
				W	
Max cycles frequency			holding	V V	1.21,9
Mechanical operation				ovoloo/b	1500
Operating times				cycles/h	1500
Average time for Us co	ontrol				
Average time for US Co	in AC				
	III AC	Closing NO			
		Closing NO	min	ma	12
				ms	28
		Opening NO	max	ms	20
		Opening NO	min	ma	8
			min	ms ms	22
	in DC		max	1115	22
	III DC	Closing NO			
		Closing NO	min	<b>122.0</b>	40
			min	ms	40
		Opening NO	max	ms	85
		Opening NO	min	ma	20
			min	ms	55
UL technical data			max	ms	55
Full-load current (FLA)	) for throo-phase /	\C motor			
Tull-load culterit (LA)	ioi tillee-pilase r	AC Motor	at 480V	Α	52
			at 600V	A	41
Yielded mechanical pe	rformanco		at 000 v		41
riciucu mediamidai pe	for single-phase	ΔC motor			
	ioi sirigie-priase	AO IIIUIUI	110/120V	HP	5
			110/1207	ПР	
				ПD	10
	for three	AC motor	230V	HP	10
	for three-phase	AC motor	230V		
	for three-phase	AC motor	230V 200/208V	HP	15
	for three-phase	AC motor	230V 200/208V 220/230V	HP HP	15 20
	for three-phase	AC motor	230V 200/208V 220/230V 460/480V	HP HP HP	15 20 40
CongrelLISE	for three-phase	AC motor	230V 200/208V 220/230V	HP HP	15 20
General USE		AC motor	230V 200/208V 220/230V 460/480V	HP HP HP	15 20 40
General USE	for three-phase  Contactor	AC motor	230V 200/208V 220/230V 460/480V	HP HP HP	15 20 40

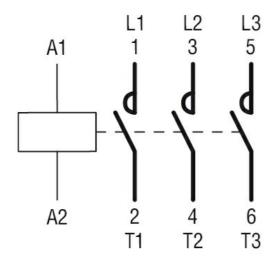


	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	150
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	150
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protection	on			
Pollution degree				3
Dimensions [mm (in)]				



Wiring diagrams





### 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

#### ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation Power contactor Product type designation **BF50** Contact characteristics Number of poles Nr. 3 Rated insulation voltage Ui IEC/EN ٧ 1000 k√ Rated impulse withstand voltage Uimp 8 Operational frequency min Ηъ 25 max Hz 400 IEC Conventional free air thermal current Ith 90 Α Operational current le AC-1 (≤40°C) Α 90 AC-1 (≤55°C) Α 75 AC-1 (≤70°C) Α 65 AC-3 (≤440V ≤55°C) Α 50 AC-4 (400V) 28 Rated operational power AC-3 (T≤55°C) 230V kW 15 400V kW 22 415V kW 30 440V kW 30 500V kW 30 690V kW 37 22 1000V kW Rated operational power AC-1 (T≤40°C) 230V kW 34 400V kW 59 500V kW 74 690V kW 102 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V Α 45 48V Α 40 75V 40 Α 110V Α 8 220V Α IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V Α 60 48V Α 60 75V Α 60 110V Α 50 7 220V IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V Α 60 48V Α 60 75V Α 60



	110V	Α	55
	220V	Α	75
IFC may surrent to in DC1 with L/D < 1 mg with 4 notes in series	220 V		
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	60
	48V	Α	60
	75V	Α	60
	110V	Α	60
	220V	Α	90
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	30
	48V	Α	25
	75V		
		Α	22
	110V	Α	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	۸	35
		A	
	48V	Α	35
	75V	Α	30
	110V	Α	25
	220V	Α	5
IFC many assemble in DC2 DC5 with L/D < 45 may with 2 males in parties	220 V	- / \	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	50
	48V	Α	50
	75V	Α	45
	110V	Α	30
	220V	A	40
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	55
	48V	Α	55
	75V		
		Α	55
	110V	Α	45
	220V	Α	50
Short-time allowable current for 10s (IEC/EN60947-1)		Α	400
Protection fuse			
Fiolection luse	0 (150)		100
	gG (IEC)	Α	100
	aM (IEC)	Α	50
Making capacity (RMS value)		Α	500
Breaking capacity at voltage			
broaking duputing at voltage	4.40\/	۸	400
	440V	Α	400
	500V	Α	352
	690V	Α	312
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
i owei dissipation per pole (average value)	1.1	101	٥.5
	Ith	W	6.5
	AC3	W	2
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	Ibin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
gsiig torquo ior oon torrinitar	min	Nlm	Λ Θ
	min	Nm	0.8
	max	Nm	1



BF5000E110

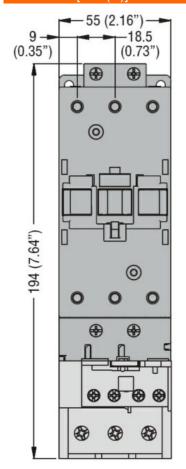
		min	Ibin	0.8
		max	lbin	0.74
	simultaneously connectable		Nr.	2
Conductor section	A)A(O/I/C :1			
	AWG/Kcmil	may		0
	Flexible w/o lug conductor section	max		2
	r lexible w/o lag corradctor section	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	· ·	min	mm²	1.5
		max	mm²	35
	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position		1		Marchala
		normal		Vertical plan ±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			g	1060
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1400000
Safety related data	Od according to EN/ISO 12490 1			
renormance level bi	0d according to EN/ISO 13489-1	rated load	cycles	1400000
		mechanical load	cycles	1500000
Mirror contats accord	ing to IEC/EN 609474-4-1	moonamoa roaa	0,0.00	yes
EMC compatibility	<u> </u>			yes
AC coil operating				
Rated AC voltage at 5	50/60Hz, 60Hz			
		min	V	60
		max	V	110
Rated AC voltage at 5	50/60Hz		V	110
AC operating voltage	( F0/0011 'I			
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	IIIdA	,003	. 10 00 max
	3.5p 33.	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out		0/11	.70.11
AC average ===!! ==	t 20°C	max	%Us	≤70 Us min
AC average coil cons	·			
	of 50/60Hz coil powered at 50Hz	in-rush	VA	35120
		111-14511	٧A	JJ 12U

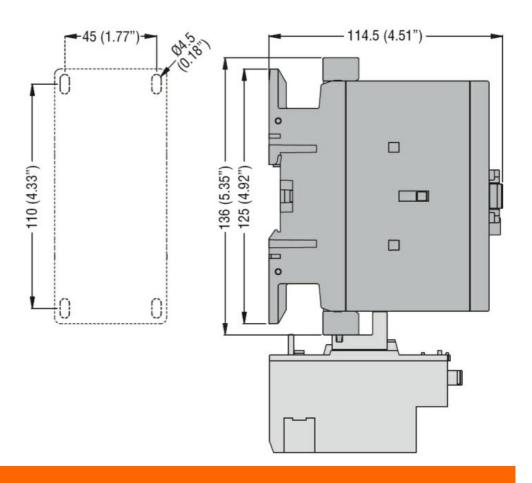


			la a lalina a	) /A	45 27
	of 50/001  = acil =a	www.arad.at.COLI-	holding	VA	1.53.7
	of 50/60Hz coil po	owered at 60HZ	in-rush	VA	35120
			holding	VA VA	1.53.7
Dissipation at holding	≤20°C 50Hz		riolalig	W	12.5
DC coil operating	-20 0 00112			**	12.0
DC rated control voltage	ge				
·	-		min	V	60
			max	V	110
DC rated control voltage	ge			V	110
DC operating voltage					
	pick-up				
			min	%Us	80 Us min
			max	%Us	110 Us max
	drop-out				
A	U 40000		max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			107	00 60
			in-rush	W	2368
Max cycles frequency			holding	W	1.21,9
Mechanical operation				cycles/h	1500
Operating times				Jy 0103/11	.500
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		3	min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			40
			min	ms	40
		Opening NO	max	ms	85
		Opening NO	min	ms	20
			max	ms	55
UL technical data			max		
Full-load current (FLA)	for three-phase AC	motor			
, ,			at 480V	Α	52
			at 600V	Α	41
Yielded mechanical pe	erformance				
	for single-phase A	AC motor			
			110/120V	HP	5
			230V	HP	10
	for three-phase A	C motor	000/000		4.5
			200/208V	HP	15
			220/230V	HP	20
			460/480V 575/600V	HP HP	40 40
General USE			373/0007	חר	40
Ocheral USE	Contactor				
	Joinacioi		AC current	Α	90
Short-circuit protection	n fuse, 600V		7.0 ouriont		
C. Ort Griddit protootion					



	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	150
		Fuse class		J
	Standard fault			_
		Short circuit current	kA	5
		Fuse rating	Α	150
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protection	n			
Pollution degree				3
Dimensions [mm (in)]				

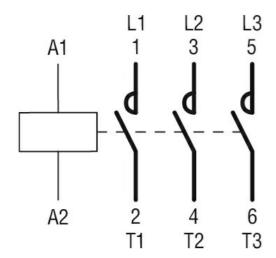




Wiring diagrams

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 50A, AC/DC COIL, 60...110VAC/DC



### 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

#### ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching





Product designation			Power contactor
Product type designation			BF50
Contact characteristics			DI 00
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
operational inequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	90
Operational current le			
	AC-1 (≤40°C)	Α	90
	AC-1 (≤55°C)	Α	75
	AC-1 (≤70°C)	Α	65
	AC-3 (≤440V ≤55°C)	Α	50
	AC-4 (400V)	Α	28
Rated operational power AC-3 (T≤55°C)			
	230V	kW	15
	400V	kW	22
	415V	kW	30
	440V	kW	30
	500V	kW	30
	690V	kW	37
	1000V	kW	22
Rated operational power AC-1 (T≤40°C)			
	230V	kW	34
	400V	kW	59
	500V	kW	74
	690V	kW	102
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		_	
	≤24V	Α	45
	48V	A	40
	75V	A	40
	110V	A	8
IFC was a compart to in DC4 with 1/D < 4 may with 2 malas in a criss	220V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	<041/	۸	00
	≤24V 48V	A	60
	75V	A	60
	75V 110V	A A	60 50
	220V	A	50 7
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	2201		
120 max outlott to iti 201 with L/11 = 1115 with 5 poles iti selles	≤24V	Α	60
	48V	A	60
	75V	A	60
	750	77	30



	110V	Α	55
	220V	Α	75
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	60
	48V	Α	60
	75V	Α	60
	110V	Α	60
	220V	Α	90
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	30
	48V	Α	25
	75V	Α	22
	110V	Α	3
	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	35
	48V	Α	35
	75V	Α	30
	110V	Α	25
	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	50
	48V	Α	50
	75V	Α	45
	110V	Α	30
	220V	Α	40
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	55
	48V	Α	55
	75V	Α	55
	110V	Α	45
01 + 12 - 14 - 14 - 15 - 15 - 15 - 15 - 15 - 15	220V	Α .	50
Short-time allowable current for 10s (IEC/EN60947-1)		Α	400
Protection fuse	0 (150)		400
	gG (IEC)	A	100
Malian and it (DMO all a)	aM (IEC)	A	50
Making capacity (RMS value)		Α	500
Breaking capacity at voltage	4.401.4	^	400
	440V	A	400
	500V	A	352
Posietones per pole (everese velve)	690V	A	312
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)	141	147	0.5
	Ith	W	6.5
Tightoning targue for tarminals	AC3	W	2
Tightening torque for terminals	!	N I.a.	4
	min	Nm Nm	4
	max	Nm	5
	min	lbin Ibin	2.95
Tightoning torque for coil terminal	max	Ibin	3.69
Tightening torque for coil terminal	min	Nlm	0.0
	min max	Nm Nm	0.8 1
	11171	INIII	1



BF5000E230

Max number of wires simultaneously connectable   Ni.   2					
Max number of wires simultaneously connectable         Nr.         2           Conductor section         AWG/Kcmil         max         2           Flexible w/o lug conductor section         min         mm²         1.5           Flexible c/w lug conductor section         min         mm²         3.5           Power terminal protection according to IEC/EN 60529         IP20 front         IP20 front           Mechanical features         onamal allowable         \$35           Operating position         normal allowable         \$35           Fixing         Screw / DIN rail 30°           Weight         g         1060           Conductor section         max         2           AWG/kcmil conductor section         max         2           AWG/kcmil conductor section         max         2           AWG/kcmil conductor section         max         2           Operations         mechanical life         cycles         15000000           Salety related data         cycles         1400000           Performance level B10d according to EN/ISO 13489-1         rated load mechanical load cycles         1400000           Salety related data         cycles         1400000           Mirror contats according to IEC/EN 609474-4-1         yes			min		
AWG/Kcmil			max	Ibin	0.74
AWG/Kcmil   max	Max number of wires s	simultaneously connectable		Nr.	2
Plexible w/o lug conductor section   min m/max   min max   min min max   min max   min max   min max   min max   min max   min	Conductor section				
Flexible w/o lug conductor section		AWG/Kcmil			
Flexible c/w lug conductor section   Flexible			max		2
Flexible c/w lug conductor section   min		Flexible w/o lug conductor section			
Flexible c/w lug conductor section			min	mm²	1.5
Main			max	mm²	35
Main		Flexible c/w lug conductor section			
Power terminal protection according to IEC/EN 60529			min	mm²	1.5
Mechanical features           Operating position         normal allowable         Vertical plan ±30°           Fixing         g 1060           Conductor section           AWG/kcmil conductor section           Mechanical life         cycles         15000000           Mechanical life         cycles         15000000           Electrical life         cycles         140000           Safety related data           Performance level B10d according to EN/ISO 13489-1         rated load         cycles         140000           Mechanical load         cycles         1400000           Mirror contats according to EEC/EN 609474-4-1         rated load         cycles         15000000           Mirror contats according to EEC/EN 609474-4-1         yes         yes           EMC compatibility         yes         yes           AC coil operating           Rated AC voltage at 50/60Hz, 60Hz         min         V         20           Ac operating voltage           of 50/60Hz coil powered at 50Hz drop-out         max         %Us         \$70 Us min           AC average coil consumption at 20°C         of 50/60			max	mm²	35
Mechanical features           Operating position         normal allowable         Vertical plan ±30°           Fixing         g 1060           Conductor section           AWG/kcmil conductor section           Mechanical life         cycles         15000000           Mechanical life         cycles         15000000           Electrical life         cycles         140000           Safety related data           Performance level B10d according to EN/ISO 13489-1         rated load         cycles         140000           Mechanical load         cycles         1400000           Mirror contats according to EEC/EN 609474-4-1         rated load         cycles         15000000           Mirror contats according to EEC/EN 609474-4-1         yes         yes           EMC compatibility         yes         yes           AC coil operating           Rated AC voltage at 50/60Hz, 60Hz         min         V         20           Ac operating voltage           of 50/60Hz coil powered at 50Hz drop-out         max         %Us         \$70 Us min           AC average coil consumption at 20°C         of 50/60	Power terminal protect	tion according to IEC/EN 60529			IP20 front
Normal allowable   Normal allo					
Normal allowable   Normal allo					
Fixing   Screw / DIN rail   35mm			normal		Vertical plan
Screw / DIN rail 35mm   35mm			allowable		•
Name	Finite a				
New Edit	rixing				
AWG/kcmil conductor section   max   2	Weight			g	
AWG/kcmil conductor section   max   2   2   2   2   2   2   2   2   2					
Operations           Mechanical life         cycles         15000000           Electrical life         cycles         1400000           Safety related data           rated load cycles         1400000           Performance level B10d according to EN/ISO 13489-1         rated load cycles         1400000           Mirror contats according to IEC/EN 609474-4-1         yes           EMC compatibility         yes           AC coil operating         min         V         100           Rated AC voltage at 50/60Hz, 60Hz         min         V         250           Rated AC voltage at 50/60Hz         v         230           AC operating voltage           of 50/60Hz coil powered at 50Hz drop-out         max         %Us         ≤70 Us min           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         ≤70 Us min           AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz coil powered at 50Hz in-rush loading         VA         35120 holding         VA         1.53.7		AWG/kcmil conductor section			
Operations           Mechanical life         cycles         15000000           Electrical life         cycles         1400000           Safety related data           Performance level B10d according to EN/ISO 13489-1         rated load cycles         1400000 mechanical load         cycles         15000000           Mirror contats according to IEC/EN 609474-4-1         yes         yes           EMC compatibility         yes           AC coil operating         min         V         100           Rated AC voltage at 50/60Hz         min         V         250           Rated AC voltage at 50/60Hz         v         230           AC operating voltage           of 50/60Hz coil powered at 50Hz drop-out         max         %Us         ≤70 Us min           AC operating voltage           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         ≤70 Us min           AC operating voltage           min         %Us         ≤70 Us min           AC operating voltage           min         %Us         ≤70 Us min           AC operating voltage         min <t< td=""><td></td><td></td><td>max</td><td></td><td>2</td></t<>			max		2
Mechanical life	Operations				_
Electrical life	•			cycles	15000000
Safety related data   Performance level B10d according to EN/ISO 13489-1   rated load cycles   1400000   mechanical load   cycles   150000000     150000000     150000000     150000000       150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000     150000000000				-	
Performance level B10d according to EN/ISO 13489-1           rated load mechanical load cycles 15000000         14000000 15000000           Mirror contats according to IEC/EN 609474-4-1         yes           EMC compatibility         yes           AC coil operating         winn         V         100           Rated AC voltage at 50/60Hz, 60Hz         min         V         250           Rated AC voltage at 50/60Hz coil powered at 50Hz drop-out         max         %Us         ≤70 Us min           AC operating voltage         min         %Us         ≤70 Us min           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         80 Us min           max         %Us         80 Us min           max         %Us         \$70 Us min           AC average coil consumption at 20°C         of 50/60Hz coil powered at 50Hz         in-rush loading         VA         35120 holding         VA         153.7				0,0.00	
Rated load   Cycles   1400000   15000000   15000000   150000000   150000000   150000000   150000000   150000000   150000000000	-	0d according to EN/ISO 13489-1			
mechanical load         cycles         15000000           Mirror contats according to IEC/EN 609474-4-1         yes           EMC compatibility         yes           AC coil operating         Text of S0/60Hz 60Hz           Rated AC voltage at 50/60Hz, 60Hz         min V 100 max V 250           Rated AC voltage at 50/60Hz         V 230           AC operating voltage         v 230           AC operating voltage         max %Us ≤70 Us min           of 50/60Hz coil powered at 60Hz pick-up         min %Us 80 Us min max           pick-up         max %Us 110 Us max           drop-out         max %Us ≤70 Us min           AC average coil consumption at 20°C         in-rush VA 35120 holding VA 1.53.7           of 50/60Hz coil powered at 60Hz oil powered at 60Hz         in-rush holding VA 1.53.7		ou according to 1.41.00 to 1.00 t	rated load	cycles	1400000
Mirror contats according to IEC/EN 609474-4-1   yes				•	
EMC compatibility  AC coil operating  Rated AC voltage at 50/60Hz, 60Hz  Rated AC voltage at 50/60Hz  Of 50/60Hz coil powered at 50Hz  drop-out  max %Us ≤70 Us min  max %Us ≤70 Us min  max %Us 110 Us max  drop-out  max %Us ≤70 Us min  AC average coil consumption at 20°C  of 50/60Hz coil powered at 50Hz  in-rush vA 35120 holding vA 1.53.7	Mirror contats accordi	ng to IEC/EN 609474-4-1		-,	·
Rated AC voltage at 50/60Hz, 60Hz   min   V   100   max   V   250					
Rated AC voltage at 50/60Hz, 60Hz         Rated AC voltage at 50/60Hz       v       250         Rated AC voltage at 50/60Hz       v       230         AC operating voltage         of 50/60Hz coil powered at 50Hz drop-out       max       %Us       ≤70 Us min         of 50/60Hz coil powered at 60Hz       max       %Us       80 Us min max         was drop-out       max       %Us       110 Us max         drop-out       max       %Us       ≤70 Us min         AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz       in-rush vA 35120 holding vA 1.53.7         of 50/60Hz coil powered at 60Hz       in-rush holding vA 1.53.7					,,,,
Min   V   100   max   V   250	·	0/60Hz, 60Hz			
Rated AC voltage at 50/60Hz         V         250           AC operating voltage         of 50/60Hz coil powered at 50Hz drop-out         max         %Us         ≤70 Us min           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         80 Us min           max         %Us         110 Us max           drop-out         max         %Us         ≤70 Us min           AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz         in-rush vA assumption of 50/60Hz coil powered at 50Hz         in-rush holding vA assumption vA assumption of 50/60Hz coil powered at 60Hz	. tatou / to Tonago at o	o, ee <u>_</u> , ee <u>_</u>	min	V	100
Rated AC voltage at 50/60Hz   V 230					
AC operating voltage  of 50/60Hz coil powered at 50Hz drop-out  max %Us ≤70 Us min  of 50/60Hz coil powered at 60Hz pick-up  min %Us 80 Us min max %Us 110 Us max  drop-out  max %Us ≤70 Us min  max %Us 50 Us min  max %Us 50 Us min  max %Us 110 Us max  drop-out  in-rush VA 35120 holding VA 1.53.7	Rated AC voltage at 5	0/60Hz	THOX		
of 50/60Hz coil powered at 50Hz drop-out    max   %Us   ≤70 Us min		0,001.12		•	
drop-out   max   %Us   ≤70 Us min	re operating remage	of 50/60Hz coil powered at 50Hz			
max         %Us         ≤70 Us min           of 50/60Hz coil powered at 60Hz         min         %Us         80 Us min           max         %Us         110 Us max           drop-out         max         %Us         ≤70 Us min           AC average coil consumption at 20°C         of 50/60Hz coil powered at 50Hz         in-rush VA 35120 holding VA 1.53.7           of 50/60Hz coil powered at 60Hz         of 50/60Hz coil powered at 60Hz         VA 1.53.7					
of 50/60Hz coil powered at 60Hz pick-up  min %Us 80 Us min max %Us 110 Us max  drop-out  Max %Us ≤70 Us min  AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz  in-rush VA 35120 holding VA 1.53.7		a.op out	max	%Us	≤70 Us min
pick-up  min %Us 80 Us min max %Us 110 Us max  drop-out  max %Us ≤70 Us min  AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz  in-rush VA 35120 holding VA 1.53.7  of 50/60Hz coil powered at 60Hz		of 50/60Hz coil powered at 60Hz	max	,,,,,	
min max       %Us min max       80 Us min max         4 Morp-out       110 Us max         Max       %Us ≤70 Us min         AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz       in-rush VA 35120 holding VA 1.53.7         of 50/60Hz coil powered at 60Hz       holding VA 1.53.7		•			
max   %Us   110 Us max		Flore ab	min	%Us	80 Us min
drop-out  max %Us ≤70 Us min  AC average coil consumption at 20°C  of 50/60Hz coil powered at 50Hz  in-rush VA 35120 holding VA 1.53.7  of 50/60Hz coil powered at 60Hz					
max       %Us       ≤70 Us min         AC average coil consumption at 20°C       50/60Hz coil powered at 50Hz         in-rush holding       VA V		dron-out	max	,000	. 10 00 max
AC average coil consumption at 20°C  of 50/60Hz coil powered at 50Hz  in-rush VA 35120 holding VA 1.53.7  of 50/60Hz coil powered at 60Hz		arop out	may	%Hs	≤70 Us min
of 50/60Hz coil powered at 50Hz  in-rush VA 35120 holding VA 1.53.7  of 50/60Hz coil powered at 60Hz	AC average coil consu	umption at 20°C	IIIdA	,003	_, 0 00 111111
in-rush VA 35120 holding VA 1.53.7 of 50/60Hz coil powered at 60Hz	, to avoluge con collect	•			
holding VA 1.53.7 of 50/60Hz coil powered at 60Hz		or coroor iz con powered at coniz	in-ruch	\/Δ	35 120
of 50/60Hz coil powered at 60Hz					
·		of 50/60Hz coil powered at 60Hz	Holding	٧٨	1.00.1
111-10511 VA 33120		or 50/001 12 con powered at 001 12	in-ruch	\/Δ	35 120
			iii iusii	٧, ١	JJ 120

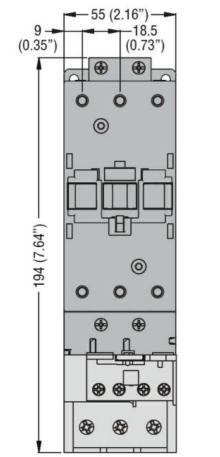


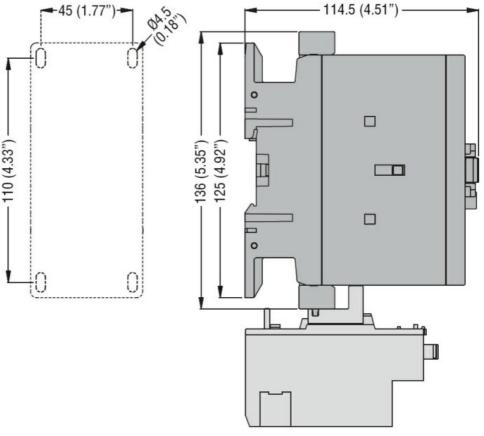
			holding	VA	15 27
Dissipation at holding	<20°C 50Hz		holding	W	1.53.7 12.5
DC coil operating	=20 0 30112			VV	12.0
DC rated control voltage	ge				
			min	V	100
			max	V	250
DC rated control voltage	ge			V	230
DC operating voltage					
	pick-up			0/11	
			min	%Us	80 Us min
	drop out		max	%Us	110 Us max
	drop-out		max	%Us	≤70 Us min
Average coil consump	ntion <20°C		IIIax	/603	270 03 11111
Average con consump	MON =20 O		in-rush	W	2368
			holding	W	1.21,9
Max cycles frequency			19		, -
Mechanical operation				cycles/h	1500
Operating times					
Average time for Us co	ontrol				
	in AC				
		Closing NO			
			min	ms	12
		0	max	ms	28
		Opening NO			0
			min max	ms ms	8 22
	in DC		Παλ	1115	22
	111 00	Closing NO			
		0.00m.g . 10	min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
Full-load current (FLA)	) for three-phase <i>i</i>	AC motor			50
			at 480V	A	52
Yielded mechanical pe	arformance		at 600V	Α	41
neided mechanical pe	for single-phase	e AC motor			
	ioi sirigie-priase		110/120V	HP	5
			230V	HP	10
	for three-phase	AC motor			
	•		200/208V	HP	15
			220/230V	HP	20
			460/480V	HP	40
			575/600V	HP	40
General USE	•				
	Contactor		40		0.0
Object also the second	- f		AC current	Α	90
Short-circuit protection					
	High fault		Short circuit current	kA	100
			Fuse rating	KA A	150
			i use raurig		100



		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	150
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
Pollution degree				3
Dimensions [mm (in)]				

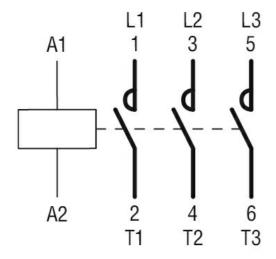
#### Dimensions [mm (in)]





Wiring diagrams





### 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

#### ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching