Conformity to standards

IEC/EN 60947-1	GB14048.4
IEC/EN 60947-4-1	UL508
IEC/EN 60947-5-1	UL486E
IEC/EN 60947-5-4	CSA2.22-14
EN50011	NF F16 101/102
EN50012	
EN50005	

Approvals/Marking

Ambient conditions

Storage temperature	-55°C to +80°C
Operation temperature	-40°C to +55°C
Without TOR	-40°C to +60°C
	-40°C to +70°C(1)
Altitude	<2000m

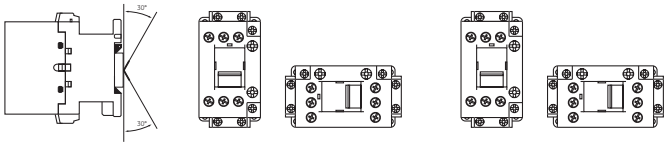
(1) From 100% to 110% of rated control voltage, no auxiliary blocks

Climatic resistance (IEC 68-2)

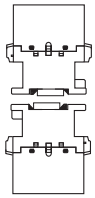
Continuous tests 40 / 125 / 56		
Cold (72h)	Temperature	-40°C
Dry heat (96h)	Temperature	+125°C
	Relative humidity	< 50%
Humid heat (56h)	Temperature	+40°C
	Relative humidity	95%
Cyclic test (6 cycles)	Humid heat	
First half-cycle	Low temperature	+25°C
	Relative humidity	93%
Second half-cycle	Low temperature	+55°C
	Relative humidity	95%

Mounting positions

Installation capabilities



With derating values



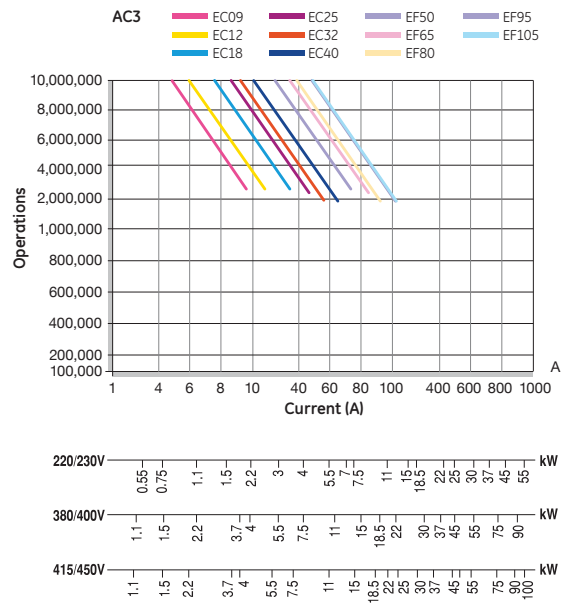
-10% connection voltage +10% disconnection voltage with same rated power, data compared to vertical mounting

Terminal capacity and tightening torque

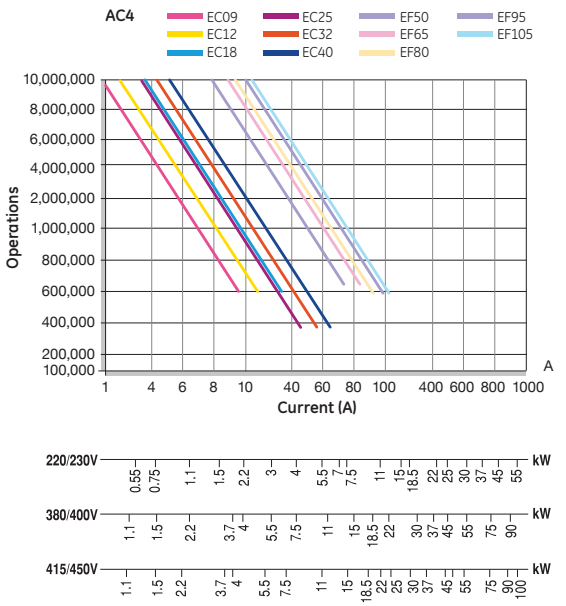
	Conventional thermal current (Ith)		EC contactors			EF contactors	
	Head type		EC09...EC18 ECAC	EC25	EC32...EC40	EF50...EF80	EF95...EF105
Box terminals							
Solid, stranded and finely stranded without ferrule	(mm²)	Slot & PZ2	0.75 ... 6	0.75 ... 10	0.75 ... 16	2.5 ... 35	4 ... 50
Finely stranded with ferrule	(mm²)	Slot & PZ2	0.75 ... 6	0.75 ... 10	0.75 ... 16	2.5 ... 35	4 ... 50
Finely stranded without ferrule	(mm²)	Slot & PZ2	0.75 ... 6	0.75 ... 10	0.75 ... 16	2.5 ... 35	4 ... 50
AWG			18 ... 10	18 ... 8	18 ... 6	13 ... 2	11 ... 1/0
Tightening torque	(Nm)		2.2	2.2	2.2	4-4.5	5.6-6.5
	(Lb x in.)		20	20	20	35-40	50-60
Solid	(mm²)					2.5 ... 35	4 ... 50
Stranded	(mm²)					2.5 ... 35	4 ... 50
Finely stranded without ferrule	(mm²)	Slot & PZ2	0.75 ... 6	0.75 ... 10	0.75 ... 16	2.5 ... 35	4 ... 50
Finely stranded with ferrule	(mm²)					2.5 ... 35	4 ... 50
AWG			18 ... 10	18 ... 8	18 ... 6	13 ... 2	11 ... 1/0
Tightening torque	(Nm)		2.2	2.2	2.2	4 - 4.5	5.6 - 6.5
	(Lb x in.)		20	20	20	35 - 40	50 - 60
Solid, stranded and finely stranded without ferrule	(mm²)					Max. 1x16 + 1x10	Max. 1x25 + 1x25
Finely stranded without ferrule	(mm²)					Max. 1x16 + 1x10	-
Finely stranded with ferrule	(mm²)	Slot & PZ2	0.75 ... 6	0.75 ... 10	0.75 ... 16	Max. 1x16 + 1x10	-
AWG			18 ... 10	18 ... 8	18 ... 6	Max. 1x5 + 1x7	Max. 1x3 + 1x3
Tightening torque	(Nm)		2.2	2.2	2.2	4 - 4.5	5.6 - 6.5
	(Lb x in.)		20	20	20	35 - 40	50 - 60

Electrical endurance

Category AC3 (3P contactors)



Category AC4 (3P contactors)



Power circuit for EC contactors

		EC 09	EC 12	EC18	EC 25	EC 32	EC 40
Three pole version							
Rated thermal current Ith at θ ≤ 55ºC	(A)	25	25	32	45	60	60
Rated operational current Ie AC-3	(A)	9	12	18	25	32	40
Rated operational voltage Ue	(V)	690V acc. IEC 60947-4-1 / 600V acc. UL-CSA					
Four pole version							
Rated thermal current Ith at θ ≤ 55ºC	(A)	-	25	32	45	60	-
Rated operational voltage Ue	(V)	690V acc. IEC 60947-4-1 / 600V acc. UL-CSA					
Three and four pole version							
Rated insulation voltage Ui	(V)	1000V acc. IEC 60947-4-1 / 600V acc. UL-CSA					
Maximum continuous current AC-1	(A)	25	25	32	45	60	60
Frequency limits	(Hz)	25...400	25...400	25...400	25...400	25...400	25...400
Making capacity (RMS) (IEC- 60947) U = 500V	(A)	220	220	220	315	520	520
Breaking capacity (RMS) (acc. IEC-60947)							
Ue = 500V	(A)	220	220	220	315	520	520
Ue = 690V	(A)	120	120	120	144	232	232
Short-time current from cold state							
1s	(A)	570	570	570	790	1265	1265
5s	(A)	254	254	254	355	565	565
10s	(A)	180	180	180	250	400	400
30s	(A)	104	104	104	145	231	231
1min	(A)	74	74	74	102	164	164
3min	(A)	42	42	42	60	95	95
Recovery time	(min)	10	10	10	10	10	10
Protection against short-circuit with fuses without thermal overload relay (TOR)							
Coordination type 1							
gL-gG (U = 500V, 50kA or U = 415V, 80kA)	(A)	40	40	50	63	80	80
Coordination type 2							
gL-gG (U = 500V, 50kA or U = 415V, 80kA)	(A)	25	35	40	50	63	80
Average Impedance per pole	(mΩ)	2.25	2.25	2.25	1.6	1.2	1.2
Power dissipation per pole							
AC-1	(W)	1.41	1.41	2.30	3.24	4.32	4.32
AC-3	(W)	0.18	0.32	0.73	1.00	1.23	1.92
Insulation resistance							
Between adjacent poles	(MΩ)	>10	>10	>10	>10	>10	>10
Between poles and earth	(MΩ)	>10	>10	>10	>10	>10	>10
Between input and output	(MΩ)	>10	>10	>10	>10	>10	>10

Power circuit for EF contactors

		EF40	EF50	EF65	EF80	EF95	EF105
Three pole version							
Rated thermal current Ith at θ ≤ 55°C	(A)	-	90	110	110	140	140
Rated operational current Ie AC-3	(A)	-	50	65	80	95	105
Rated operational voltage Ue	(V)	690V acc. IEC 60947-4-1 / 600V acc. UL-CSA					
Four pole version							
Rated thermal current Ith at θ ≤ 55°C	(A)	90	-	110	110	140	-
Rated operational voltage Ue	(V)	690	-	690V acc. IEC 60947-4-1 / 600V acc. UL-CSA			-
Three and four pole version							
Rated insulation voltage Ui	(V)	1000V acc. IEC 60947-4-1 / 600V acc. UL-CSA					
Maximum continuous current AC-1	(A)	90	90	110	110	140	140
Frequency limits	(Hz)	25...400	25...400	25...400	25...400	25...400	25...400
Making capacity (RMS) (IEC- 60947)	(A)	1000	1000	1000	1000	1280	1280
Breaking capacity (RMS) (acc. IEC-60947)							
Ue = 400V	(A)	920	920	920	920	1050	1050
Ue = 500V	(A)	920	920	920	920	1050	1050
Ue = 690V	(A)	780	780	780	780	950	950
Short-time current from cold state							
1s	(A)	1580	1580	2530	2530	3300	3300
5s	(A)	565	565	1130	1130	1485	1485
10s	(A)	500	500	800	800	1050	1050
30s	(A)	290	290	460	460	600	600
1min	(A)	205	205	325	325	430	430
3min	(A)	120	120	185	185	250	250
Recovery time	(min)	10	10	10	10	10	10
Protection against short-circuit with fuses without thermal overload relay (TOR)							
Coordination type 1							
gL-gG	(A)	200	200	200	200	250	250
Coordination type 2							
gL-gG	(A)	100	100	125	125	160	200
Without welding							
gL-gG	(A)	80	80	100	100	140	160
Average impedance per pole	(mΩ)	0.85	0.85	0.86	0.86	0.76	0.76
Power dissipation per pole							
AC-1	(W)	6.89	6.86	10.40	10.40	14.89	14.89
AC-3	(W)	1.36	2.12	3.63	5.50	6.86	8.37
Insulation resistance							
Between adjacent poles	(MΩ)	>10	>10	>10	>10	>10	>10
Between poles and earth	(MΩ)	>10	>10	>10	>10	>10	>10
Between input and output	(MΩ)	>10	>10	>10	>10	>10	>10

Control circuit - Alternating current for EC contactors

		EC09 up to EC18 and ECAC	EC25 up to EC40
Rated insulation voltage Ui	(V)	1000	1000
Standard voltages Us 50Hz	(V)	12-600	12-600
Standard voltages Us 60Hz	(V)	12-600	12-600
Voltage operating limits 50-60Hz coils			
Operating 50Hz xUs		0.8 -1.1	0.8 -1.1
Operating 60Hz xUs		0.85-1.1	0.85-1.1
Pick-up 50Hz xUs		0.5...0.8	0.6...0.8
Pick-up 60Hz xUs		0.55...0.85	0.65...0.85
Drop-out 50Hz xUs		0.35...0.55	0.30...0.55
Drop-out 60Hz xUs		0.35...0.55	0.30...0.55
Coil Consumption at Us (cold state)			
Magnetic circuit closed (50Hz/60Hz)	(VA)	9 / 6	11.3 / 8.5
Magnetic circuit opened (50Hz/60Hz)	(VA)	70.1 / 68.2	144 / 138
Power factor			
Magnetic circuit closed cos φ		0.24	0.20
Magnetic circuit opened cos φ		0.85	0.70
Opening and closing times			
Values between +10% Us and –20% Us			
Making time on energisation (NO)	(ms)	10 - 25	10 - 25
Breaking time on de-energisation (NO)	(ms)	5 - 15	5 - 15
Values at Us			
Making time on energisation (NO)	(ms)	10 - 25	10 - 25
Breaking time on de-energisation (NO)	(ms)	5 - 15	5 - 15
Mechanical endurance			
Bifrequency coils (at 50Hz)	10^6 ops.	10	10
Maximum rate			
AC-1 at rated power	ops./h	1200	1200
AC-2 at rated power	ops./h	1200	1000
AC-3 at rated power	ops./h	1200	1000
AC-4 at rated power	ops./h	360	240
No load	ops./h	7200	7200

Direct current for EC contactors

		Coils with wide voltage range		Coils with low consumption	
		EC09 up to EC18 and ECAC	EC25 up to EC40	EC09 up to EC18	EC25 up to EC40
Rated insulation voltage Ui	(V)	1000	1000	1000	1000
Standard voltages Us DC	(V)	12 - 400	12 - 400	12 - 400	12 - 400
Operating Limits					
Operating xUs	(V DC)	0.70 - 1.25	0.70 - 1.25	0.80 - 1.1	0.80 - 1.1
Pick-up xUs	(V DC)	0.45 - 0.65	0.45 - 0.65	0.48 - 0.68	0.48 - 0.68
Drop-out xUs	(V DC)	0.12 - 0.30	0.12 - 0.30	0.12 - 0.30	0.12 - 0.30
Coil Consumption at Us (cold state)					
Magnetic circuit open and closed	(W)	7.5	9	3.6	5.3
Opening and closing times					
Values between +10% Us and –20% Us					
Making time on energisation (NO)	(ms)	33 - 78	35 - 154	47 - 173	48 - 96
Breaking time on de-energisation (NO)	(ms)	14 - 18	15 - 26	12 - 15	8 - 26
Values at Us					
Making time on energisation (NO)	(ms)	33 - 78	35 - 66	44 - 83	33 - 75
Breaking time on de-energisation (NO)	(ms)	14 - 18	15 - 24	13 - 20	12 - 24
Mechanical endurance					
	10^6 ops.	10	10	10	10
Maximum rate					
AC-1 at rated power	ops./h	1200	1200	1200	1200
AC-2 at rated power	ops./h	1200	1000	1200	1000
AC-3 at rated power	ops./h	1200	1000	1200	1000
AC-4 at rated power	ops./h	360	240	360	240
No load	ops./h	7200	7200	7200	7200

Control circuit - Alternating current for EF contactors

		EF50A up to EF80A	EF95A up to EF105A
Rated insulation voltage Ui	(V)	1000	1000
Standard voltages Us 50-60Hz	(V)	12-600	12-600
Voltage operating limits 50-60Hz coils			
Operating 50Hz xUs		0.8 -1.1	0.8 -1.1
Operating 60Hz xUs		0.85-1.1	0.85-1.1
Pick-up 50Hz xUs (at an ambient temperature of 25°C)		0.5...0.8	0.5...0.8
Pick-up 60Hz xUs (at an ambient temperature of 25°C)		0.6...0.8	0.6...0,8
Drop-out 50Hz xUs (at an ambient temperature of 25°C)		0.30....0.55	0.30....0.55
Drop-out 60Hz xUs (at an ambient temperature of 25°C)		0.30....0.55	0.30....0.55
Coil consumption at Us (cold state)			
Magnetic circuit closed (50Hz/60Hz)	(VA)	25 / 16	25 / 16
Magnetic circuit opened (50Hz/60Hz)	(VA)	245 / 204	245 / 204
Thermal power dissipation (50Hz/60Hz)	(W)	5.2 / 4.3	5.2 / 4.3
Power factor (50Hz)			
Magnetic circuit closed cos φ		0.26	0.26
Magnetic circuit opened cos φ		0.54	0.54
Opening and closing times			
Values between +10% Us and –20% Us			
Making time on energisation (NO)	(ms)	9...35	9...35
Breaking time on de-energisation (NO)	(ms)	9...15	9...15
Values at Us			
Making time on energisation (NO)	(ms)	15...35	15...35
Breaking time on de-energisation (NO)	(ms)	9...15	9...15
Mechanical endurance			
Bifrequency coils (at 50Hz)	10^6 ops.	5	5
Maximum rate			
AC-1 at rated power	ops./h	1200	1200
AC-2 at rated power	ops./h	1000	750
AC-3 at rated power	ops./h	1200	600
AC-4 at rated power	ops./h	200	200
No load	ops./h	3600	3600

Alternating current / Direct current for EF contactors

		Coils with wide voltage range	
		EF50E up to EF80E	EF95E up to EF105E
Rated insulation voltage Ui	(V)	1000	10000
Standard voltages Us DC	(V)	24 - 500	24 - 500
Operating Limits			
Operating xUs	(V DC)	0.85-1.1	0.85-1.1
Pick-up xUs	(V DC)	0.75	0.75
Drop-out xUs	(V DC)	0.5	0.5
Coil consumption at Us (cold state)			
Magnetic circuit closed AC	(VA)	2.6	2.6
Magnetic circuit open AC	(VA)	174	174
Magnetic circuit closed DC	(VA)	1.7	1.7
Magnetic circuit open DC	(VA)	171	171
Opening and closing times			
Values at Us			
Making time on energisation (NO)	(ms)	40-75	40 - 75
Breaking time on de-energisation (NO)	(ms)	5-25	5 - 25
Mechanical endurance			
	10^6 ops.	5	5
Maximum rate			
AC-1 at rated power	ops./h	1200	1200
AC-2 at rated power	ops./h	1200	1200
AC-3 at rated power	ops./h	1200	1200
AC-4 at rated power	ops./h	200	200
No load	ops./h	2500	2500

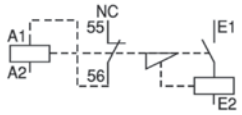
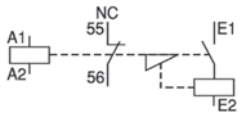
Built-in auxiliary contacts

		EC09 up to EC25 and ECAC
Rated insulation voltage Ui according to IEC 60947	(V)	1000
Rated thermal current Ith a θ ≤ 55°C	(A)	10
Making capacity (RMS) acc. to IEC 60947		
AC-15 Ue ≤ 400V, 50-60Hz	(A)	105
DC-13 Ue ≤ 220V DC	(A)	105
Breaking capacity (RMS) acc. to IEC 60947		
AC-15 Ue ≤ 400V, 50-60Hz	(A)	105
DC-13 Ue ≤ 220V DC	(A)	2
AC-15 rated voltage and current Ue-Ie according to IEC	(V-A)	110/120-10 220/230-10 380/400-6 415/450-5 500-4 690/660-2
according to UL, CSA		A600
DC-13 rated voltage and current Ue-Ie according to IEC	(V-A)	24-6 48-4 110-2 220-0.7 440-0.35
according to UL, CSA		Q600
Electrical endurance	10^6 ops.	0.2
Minimum operational power (operational safety)		17 V - 5mA
Short-circuit protection max. fuse class gl-gG without welding	(A)	10
Insulation resistance Between contacts	(MΩ)	>10
Between contacts and earth	(MΩ)	
Guaranteed no overlap between NO and NC contacts		
Space		1.3mm
Impedance of the contacts	(MΩ)	2.7

Auxiliary contact blocks

		ECFA/ECLA/BCLL
Rated insulation voltage Ui according to IEC 60947	(V)	1000
Rated thermal current Ith at θ ≤ 55°C	(A)	10
Making capacity (Ieff) according to IEC 60947		
AC-15 Ue ≤ 400V, 50-60Hz	(A)	60
DC-13 Ue ≤ 220V DC	(A)	60
Breaking capacity (Ieff) according to IEC 60947		
AC-15 Ue ≤ 400V, 50-60Hz	(A)	60
DC-13 Ue ≤ 220V DC	(A)	0.95
AC-15 rated voltage and current Ue-Ie according to IEC	(V-A)	110/120-6 220/230- 6 380/400-4 415/440-3.5 500-2.5 660/660-1.5
according to UL, CSA		A600
DC-13 rated voltage and current Ue-Ie according to IEC	(V-A)	24-4 48-2 110-0.7 220-0.3 440-0.15
according to UL, CSA		Q600
Electrical endurance	10^6 ops.	0.2
Mechanical endurance	10^6 ops.	10
Minimum operational current (operational safety)		17-5 V-mA
Short-circuit protection max. fuse class gl-gG without welding	(A)	10
Insulation resistance Between contacts	(MΩ)	>10
Between contacts and earth	(MΩ)	
Guaranteed no overlap between NO and NC contacts		
Space		1.6mm for ECFA / 2.2mm for ECLA/ 1.3mm for BCLL
Impedance of the contacts	(mili)	2.7

Mechanical latch blocks

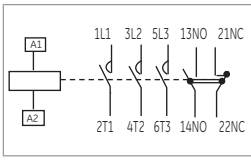
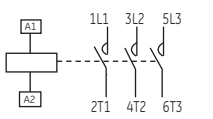
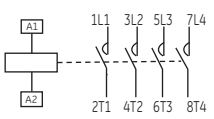
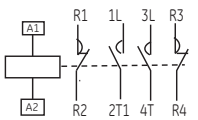
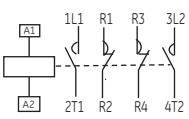
Rated insulation voltage Ui	(V)	1000
Standard voltages Us: 50 to 60Hz and DC	(V)	24-660 & 24-440
Operating limits		85% to 110%
Consumption for unlatching (auto cut-out)	AC/DC	
24 to 72V		30W / 25VA
110 to 440V		15W / 12VA
Electrical unlatching control		18
Minimum impulse	(ms)	25
Maintained		Auto cut by internal contact
Manual unlatching control		By manual push-button
Electrical making control		
Minimum pulse	(ms)	40 (auto cut)
Manual making control		By manual push-button
Auxiliary contact NC		
AC-15 utilisation according to IEC	(V-A)	110/120-6 220/230-6 380/400-4 415/450-3.5 500-2.5 690/660-1.5
according to UL/CSA		A600
DC-13 utilisation according to IEC	(V-A)	24-4 48-2 110-0.7 220-0.3 440-0.15
according to UL/CSA		Q600
Mechanical endurance	10^6 ops.	0.2
Wiring diagrams		
Alternating current		
Alternating current / Direct current		

Terminal capacity

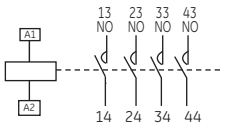
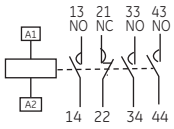
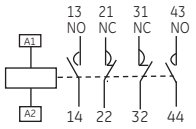
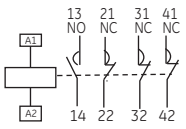
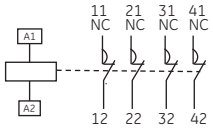
Terminal capacity		Screw plate ECMLSA, ECMLSD
Flexible wire	(mm^2)	2x0.5...2.5
AWG wire		2x20...14
Standard gauge		A3
Tightening torque	(Nm/Lb·in)	1.1 / 10

Terminal numbering

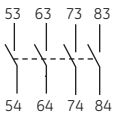
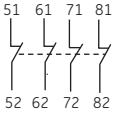
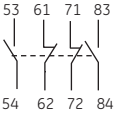
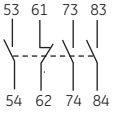
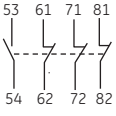
3P and 4P contactors

EC09A311..EC25A311	EC32A300..EF105A300	EC12A400..EF95A400	EC12AB00..EC25AB00	EC32AB00..EF80AB00
EC09D311..EC25D311	EC32D300..EF105E300	EC12D400..EF95E400	EC12DB00..EC25DB00	EC32DB00..EF80EB00
				

Auxiliary contactors

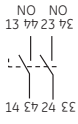
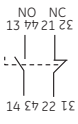
ECACA440	ECACA431	ECACA422	ECACA413	ECACA404
ECACD440	ECACD431	ECACD422	ECACD413	ECACD404
				

Auxiliary contact blocks - Front mounting

ECFA440	ECFA404	ECFA422	ECFA431	ECFA413
				

ECFA211	ECFA220	ECFA202
		

Auxiliary contact blocks - Lateral mounting

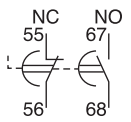
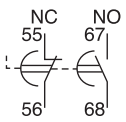
ECLA20	ECLA11	ECLA02	BCLL20	BCLL11
				

Mechanical and mechanical/electrical interlock

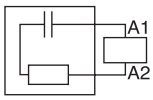
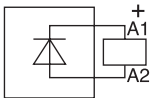
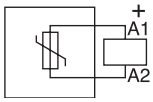
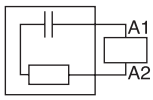
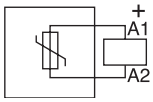
ECMI - BELA	ECMI02 - BELA02
	

Terminal numbering (continued)

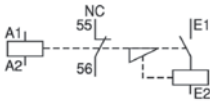
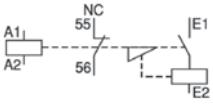
Pneumatic timer blocks

ECPTD	ECPTC
	

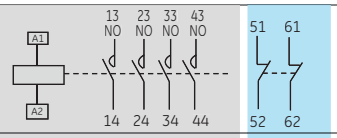
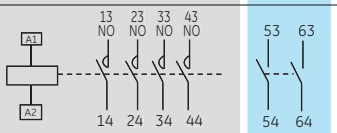
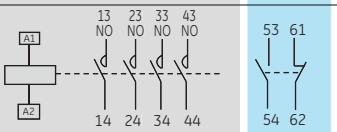
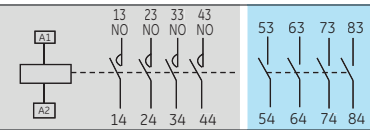
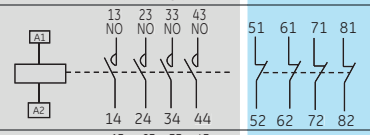
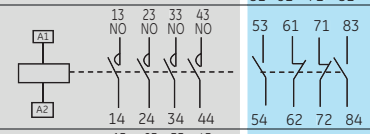
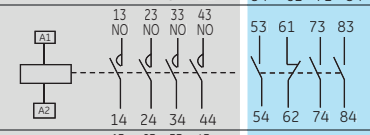
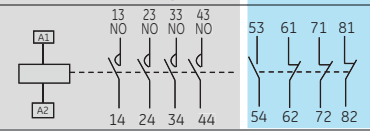
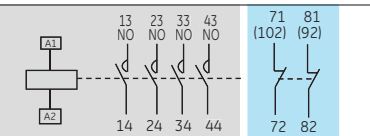
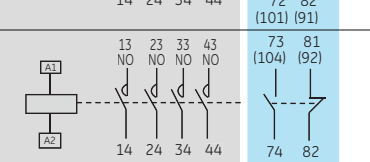
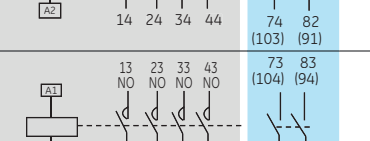
Voltage suppressor blocks

ECSURC	ECSUDI	ECSUVI	BSLR3	BSLV3
				

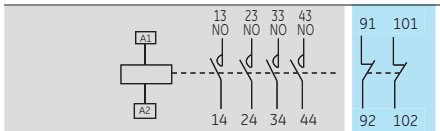
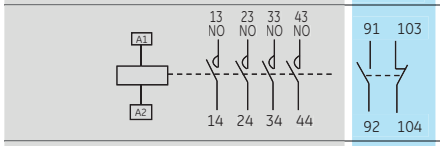
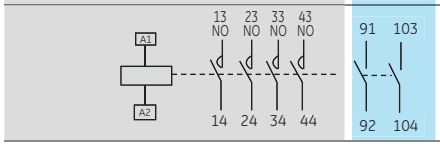
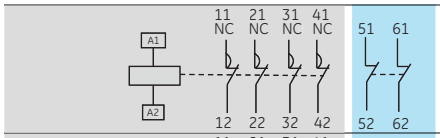
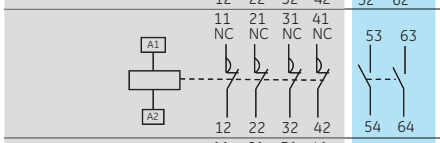
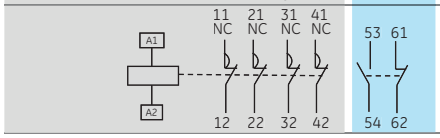
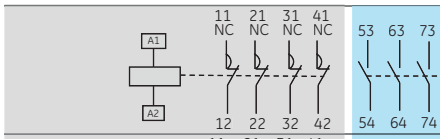
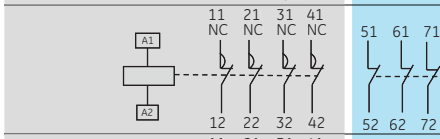
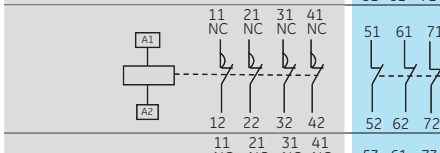
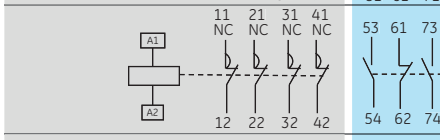
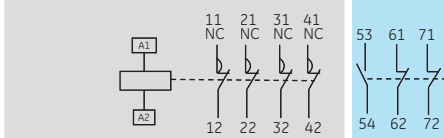
Mechanical latch block

ECMLA	ECMLD
c. alterna 	AC /DC 

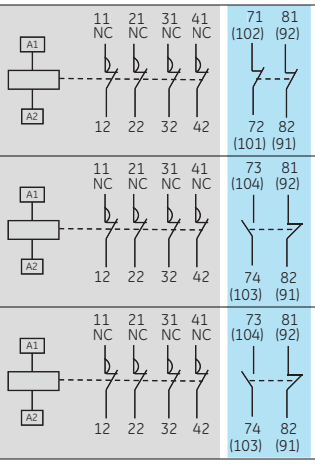
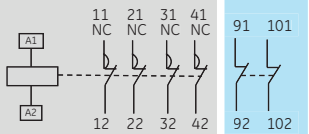
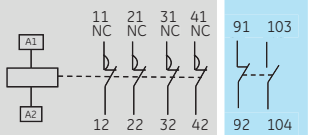
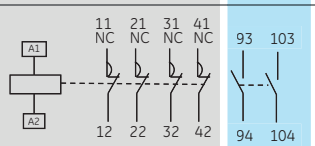
Terminal numbering according to EN 50011

Auxiliary contacts	Description	NO	NC	Possible basic auxiliary contactors + Auxiliary contacts blocks to be added
4NO auxiliary contactor terminal combination with 2P FRONTAL block				
	42E	4	2	ECACA440 ECACD440 +ECFA202
	60E	6	0	ECACA440 ECACD440 +ECFA220
	51E	5	1	ECACA440 ECACD440 +ECFA211
4NO auxiliary contactor terminal combination with 4P FRONTAL block				
	80E	8	0	ECACA440 ECACD440 +ECFA440
	44E	4	4	ECACA440 ECACD440 +ECFA440
	62E	6	2	ECACA440 ECACD440 +ECFA422
	71E	7	1	ECACA440 ECACD440 +ECFA431
	53E	5	3	ECACA440 ECACD440 +ECLFA413
4NO auxiliary contactor terminal combination with LATERAL block mounted on the RIGHT side of the contactor				
	42	4	2	ECACA440 ECACD440 +ECLA202
	51	5	1	ECACA440 ECACD440 +ECLA211
	60	6	0	ECACA440 ECACD440 +ECLA220

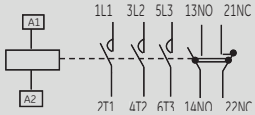
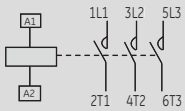
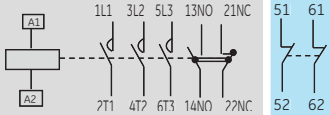
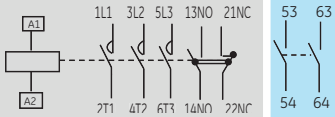
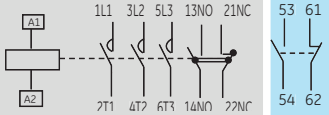
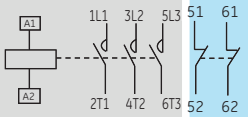
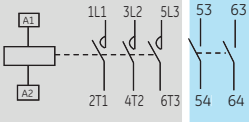
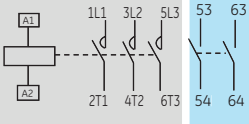
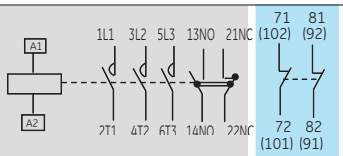
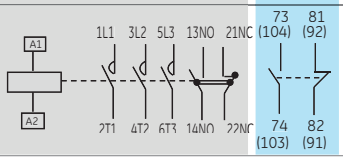
Terminal numbering according to EN 50011 (continued 1)

Auxiliary contacts	Description	NO	NC	*Possible basic auxiliary contactors + Auxiliary contacts blocks to be added*
4NO auxiliary contactor terminal combination with LATERAL block mounted on the LEFT side of the contactor				
	42	4	2	ECACA440 ECACD440 +ECLA202
	51	5	1	ECACA440 ECACD440 +ECLA211
	6	6	0	ECACA440 ECACD440 +ECLA220
4NC auxiliary contactor terminal combination with 2P FRONTAL block				
	06E	6	0	ECACA404 ECACD404 +ECFA202
	24E	2	4	ECACA404 ECACD404 +ECFA220
	15E	5	1	ECACD404 ECACA404 +ECFA211
4NC auxiliary contactor terminal combination with 4P FRONTAL block				
	44E	4	4	ECACA404 ECACD404 +ECFA440
	08E	0	8	ECACA404 ECACD404 +ECFA404
	26E	2	6	ECACA404 ECACD404 +ECFA422
	35E	3	5	ECACA404 ECACD404 +ECFA431
	17E	1	7	ECACA404 ECACD404 +ECLFA413

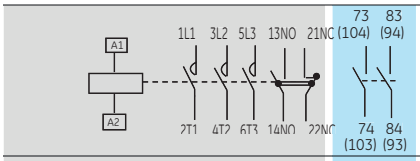
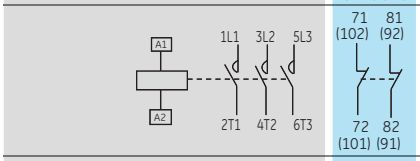
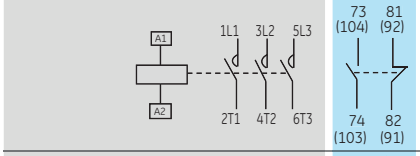
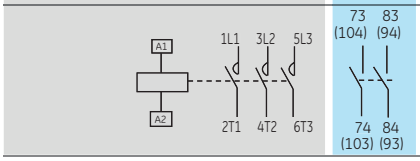
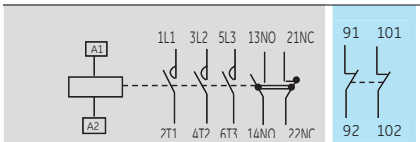
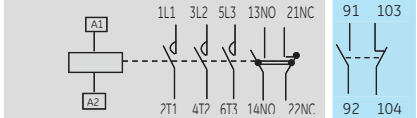
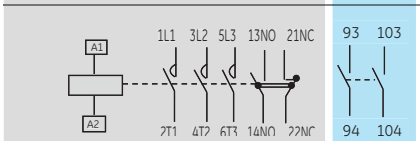
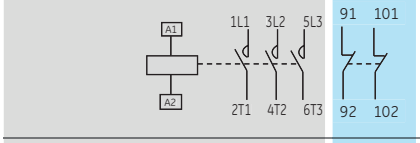
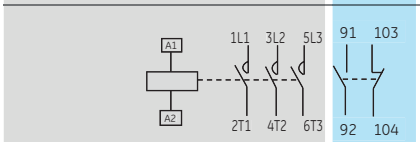
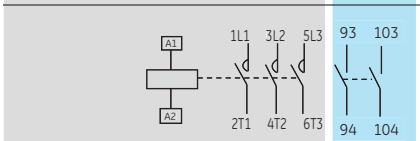
Terminal numbering according to EN 50011 (continued 2)

Auxiliary contacts	**Description**	NO	NC	*Possible basic auxiliary contactors + Auxiliary contacts blocks to be added*
4NC auxiliary contactor terminal combination with LATERAL block mounted on the RIGHT side of the contactor				
	42	0	6	**ECACA404** **ECACD404** **+ECLA202**
	15	1	5	**ECACA404** **ECACD404** **+ECLA211**
	24	2	4	**ECACA404** **ECACD404** **+ECLA220**
4NC auxiliary contactor terminal combination with LATERAL block mounted on the LEFT side of the contactor				
	42	4	2	**ECACA440** **ECACD440** **+ECLA202**
	51	5	1	**ECACA440** **ECACD440** **+ECLA211**
	6	6	0	**ECACA440** **ECACD440** **+ECLA220**

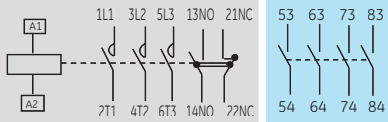
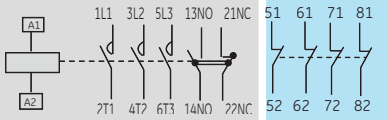
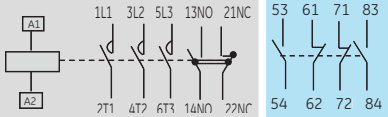
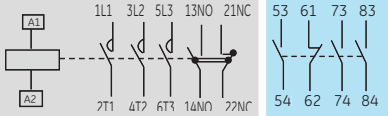
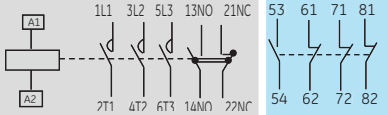
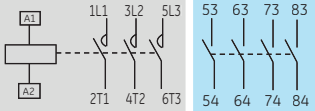
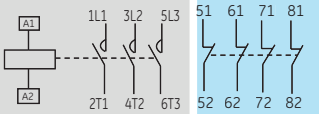
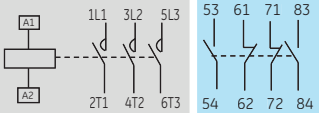
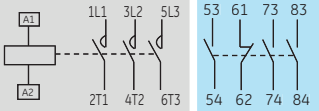
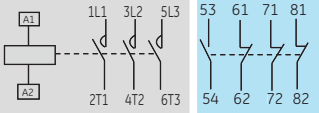
Terminal numbering according to EN 50012

Auxiliary contacts	Description	NO	NC	Possible basic auxiliary contactors + Auxiliary contacts blocks to be added
Terminal numbering according to EN 50012				
	11E	1	1	**EC09A311..EC25A311** **EC09D311..EC25D311**
	-	0	0	**EC32A300..EF105A300** **EC32D300..EF105E300**
FRONT mounted auxiliary contact blocks with 2 contacts each				
	13	1	3	**EC09A311..EC25A311** **EC09D311..EC25D311** **+ECFA202**
	31	3	1	**EC09A311..EC25A311** **EC09D311..EC25D311** **+ECFA220**
	22	2	2	**EC09A311..EC25A311** **EC09D311..EC25D311** **+ECFA211**
	02	0	2	**EC32A300..EF105A300** **EC32D300..EF105E300** **+ECFA202**
	20	2	0	**EC32A300..EF105A300** **EC32D300..EF105E300** **+ECFA220**
	11	1	1	**EC32A300..EF105A300** **EC32D300..EF105E300** **+ECFA211**
LATERAL mounted auxiliary contact blocks with 2 contacts each - RIGHT side mounted				
	13	1	3	**EC09A311..EC25A311** **EC09D311..EC25D311** **+ECLA220**
	22	2	2	**EC09A311..EC25A311** **EC09D311..EC25D311** **+ECLA211**

Terminal numbering according to EN 50012 (continued 1)

Auxiliary contacts	Description	NO	NC	*Possible basic auxiliary contactors + Auxiliary contacts blocks to be added*
***LATERAL** mounted auxiliary contact blocks with 2 contacts each - **RIGHT** side mounted (continued)*				
	31	3	1	EC09A311..EC25A311 EC09D311..EC25D311 +ECLA220
	02	0	2	EC32A300..EC40A300 EC32D300..EC40D300 +ECLA202
	11	1	1	EC32A300..EC40A300 EC32D300..EC40D300 +ECLA211 EF50A300....EF105A300 EF50E300....EF105E300 +BCLL11
	20	2	0	EC32A300..EC40A300 EC32D300..EC40D300 +ECLA220 EF50A300....EF105A300 EF50E300....EF105E300 +BCLL20
***LATERAL** mounted auxiliary contact blocks with 2 contacts each - **LEFT** side mounted*				
	13	1	3	EC09A311..EC25A311 EC09D311..EC25D311 +ECLA202
	22	2	2	EC09D311..EC25D311 EC09A311..EC25A311 +ECLA211
	31	3	1	EC09A311..EC25A311 EC09D311..EC25D311 +ECLA220
	02	0	2	EC32A300..EC40A300 EC32D300..EC40D300 +ECLA202
	11	1	1	EC32A300..EC40A300 EC32D300..EC40D300 +ECLA211 EF50A300....EF105A300 EF50E300....EF105E300 +BCLL11
	20	2	0	EC32A300..EC40A300 EC32D300..EC40D300 +ECLA220 EF50A300....EF105A300 EF50E300....EF105E300 +BCLL20

Terminal numbering according to EN 50012 (continued 2)

Auxiliary contacts	Description	NO	NC	*Possible basic auxiliary contactors + Auxiliary contacts blocks to be added*
***FRONT** mounted auxiliary contact blocks with 4 contacts each*				
	51	5	1	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA440
	15	1	5	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA404
	33	3	3	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA422
	42	4	2	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA431
	24	2	4	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA413
	40	4	0	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA440
	04	0	4	EC09A311..EC25A311 EC09D311..EC25D311 +ECFA404
	22	2	2	EC32A300..EF105A300 EC32D300..EF105E300 +ECFA422
	31	3	1	EC32A300..EF105A300 EC32D300..EF105E300 +ECFA431
	13	1	3	EC32A300..EF105A300 EC32D300..EF105E300 +ECFA413