

IEC Contactor Specifications

Bulletin Numbers 100/104-K, 100/104-C, 100/104S-C, 100/104-E, 100S-E, 100/104-D, 100S-D, 100-G, 100Q-C

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Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, https://www.rockwellautomation.com/global/certification/overview.page	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

Product Line Overview

IEC Contactors

					
Bulletin No.	100-K/104-K	100-C/104-C	100-E/104-E	100-D/104-D	100-G
Screw Terminals	✓	✓	Thru-hole	Thru-hole, threaded (630...860 A)	Thru-hole
Spring Terminals	✓ (5...9 A)	✓ (9...16 A)		—	—
Max. Current I_e	12 A	97 A	2650 A	860 A	1200 A
Current Rating	5...12 A	9...97 A	116...2650 A	115...860 A	550...1200 A
Features	- Mini-contactors - Uniform panel mounting dimensions - Panel mounting or mounting on 35 mm DIN Rail - AC or DC coil control - Made of environmentally friendly materials	- Panel mounting or mounting on 35 mm DIN Rail - AC or DC coil control - Reversible coil terminals (line or load side) - Common accessories - Made of environmentally friendly materials	- Panel mounting E116...E370 AC/DC electronic coil or optional with PLC interface E400...E2650 AC/DC with PLC interface - Made of environmentally friendly materials	- Panel mounting only - Made of environmentally friendly materials - AC or DC coil control (conventional or electronic) - Integrated PLC interface (electronic coil)	- Panel mounting - AC or DC coil control - Horizontal or vertical interlock - Latching 4th pole
Contacts	3 power poles with internal N.O. or N.C. auxiliary contact, or 4 power poles. Optional front-mounted 2- or 4-pole external auxiliary contact block.	3 power poles with internal N.O. or N.C. auxiliary contact or 4 power poles. Optional front- or side-mounted 1-, 2- or 4-pole external auxiliary contact block.	3 main poles with 2 auxiliary contacts (1 N.O. and 1 N.C.) Optional side-mounted 2-pole external auxiliary contact block.	3 power poles with external N.O. and N.C. side-mounted auxiliary contact. Optional side-mounted 2-pole external auxiliary contact blocks	3 power poles with N.O. and N.C. front-mounted auxiliary contact. Optional 4th pole and auxiliary contacts
Coil Voltages	AC = 24...600V, 50/60Hz DC = 12...250V	AC = 12...600V, 50/60Hz DC = 9...250V	24...500V 50/60 Hz/DC	Conventional Coils Cat. Nos. 100-D115...D180 AC: 24...550V 50 Hz, 24...600V 60Hz, 100...277V 50/60Hz DC: 24...250V DC Electronic Coils Cat. Nos. 100-D115...D300 AC: 24...500V 50/60 Hz DC: 24...255V DC Cat. Nos. 100-D420 AC: 42...500V 50/60 Hz DC: 48...255V DC Cat. Nos. 100-D630...D860 AC: 100...600V 50/60 Hz DC: 110...255V DC	AC = 110...480V, 50/60Hz DC = 100...440V
Optional Overload Relays	Electronic or bimetallic	Electronic or bimetallic	Electronic	Electronic	Electronic
Optional Accessories	- Front-mount auxiliary contacts - Surge suppressors - Electronic timers - Mechanical interlocks	- Front or side-mount auxiliary contacts - Surge suppressors - Electronic or pneumatic timers - Mechanical interlocks - Mechanical latches	- Side-mount auxiliary contacts - Mechanical interlocks - Terminal lugs - Terminal shields - Connecting bars	- Side-mount auxiliary contacts - Surge suppressors - IP20 terminal blocks - Terminal shields - Terminal covers - Connecting components - Terminal lugs - Mechanical/electrical interlocks	- Auxiliary contact 4th pole - Vertical interlock - Horizontal interlock - Mechanical latch
Standards/Certifications	- UL - CSA - IEC - CE Marked - CCC	- UL - CSA - IEC - CE Marked - CCC	- EN/IEC - CE Marked - cULus - CCC - EAC - C-tick	- UL - CSA - IEC - CE Marked - CCC(115...180 A - conventional coil; 140...420 A - electronic coil)	- UL - CSA - IEC - CE Marked

Safety Contactors

			
Bulletin No.	1005-C/1045-C	1005-E	1005-D
Screw Terminals	✓	Thru-hole	Thru-hole, threaded (630...860 A)
Max. Current I_e	97 A	750 A	860 A
Current Rating	9...97 A	116...750 A	115...860 A
Features	- Positively guided/mechanically linked auxiliary contacts - Front-mounted auxiliary contacts: - Permanently fixed - Protective cover to prevent manual operation - Red contact housing for easy identification - Incorporates IEC 947-5-1 "Mechanically Linked" symbol - Optional gold-plated bifurcated versions - AC and DC operating coils - SUVA third-party certification	- Mirror contact performance on auxiliary contacts - Red N.C. low-power auxiliary contact used for feedback circuit - SUVA third-party certification - AC and DC operating coils "Mirror Contact" symbol on front	- Mirror contact performance on auxiliary contacts, which are required in feedback circuit for modern safety applications. - The N.C. auxiliary contacts will not change state when a power contact welds. - SUVA third-party certification - AC and DC operating coils "Mirror Contact" symbol
Contacts	3 main poles with N.C. mechanically linked or mirror feedback contacts	3 main poles with N.C. mirror feedback contacts	3 main poles with N.C. mirror feedback contacts
Coil Voltages	AC = 12...600V, 50/60Hz DC = 12...250V	24...500V 50/60 Hz/DC	Conventional Coils Cat. Nos. 1005-D115...D180 AC: 24...550V, 50 Hz; 24...600V, 60Hz; 100...277V, 50/60Hz DC: 24...250V Electronic Coils Cat. Nos. 1005-D115...D300 AC: 24...500V, 50/60 Hz DC: 24...255V Cat. Nos. 1005-D420 AC: 42...500V 50/60 Hz DC: 48...255V Cat. Nos. 1005-D630...D860 AC: 100...600V, 50/60 Hz DC: 110...255V
Optional Accessories	- Side-mount auxiliary contacts - Surge suppressors - Electronic timers - Mechanical interlocks	- Side-mount auxiliary contacts - Terminal shields - Terminal lugs - Terminal enlargements - Terminal extensions - Connection bars for 140G molded case circuit breakers, 140MG motor protection circuit breakers, and 140MG motor circuit protectors	- Side-mount auxiliary contacts - Surge suppressors - IP20 terminal blocks - Terminal shields - Terminal covers - Connecting components - Terminal lugs - Mechanical/electrical interlocks
Standards Compliance	- EN/IEC 60947-4 - IEC 60947-5-1 Annex L — Mechanically Linked Contacts - IEC 60947-4-1 Annex H — Mirror Contacts - UL 508 - CSA C22.2 No. 14 - EN50205	- EN/IEC 60947-4-1 - IEC 60947-4-1, Annex F — Mirror Contacts - UL 60947-4-1 - CSA C22.2, No. 60947-4-1	- EN/IEC 60947-4 - IEC 60947-4-1 - IEC 60947-4-1/A1: 2002-09, Annex F - UL 508 - CSA C22.2, No. 14
Certifications	- cULus Listed (File No. E3125; Guide NLDX, NLDX7) - SUVA Third-Party Certified - CE Marked	- cULus Listed (File No. E41850; Guide No. NLDX, NLDX7) - CE Marked - CCC - UL - CSA - EAC - RCM (C-tick) - SUVA Third-Party Certified	- cULus Listed (File No. E3125; Guide No. NLDX, NLDX7) - SUVA Third-Party Certified - CE Marked - CCC (115...180 A - conventional coil; 140...420 A - electronic coil)

100-G Contactors

Product Selection—100-G Contactors

- 315...710 kW, 400V
- 350...900 Hp, 460/575V
- 3-Pole contactors
- 4th add-on neutral switching pole AC and DC control
- Horizontal and vertical interlocking Mechanical latching
- Meets IEC, CE, and cULus Standards and Certifications



The Bulletin 100-G contactor product family provides reliable switching of motor loads up to 1200 A. A complete range of accessories including auxiliary contacts, mechanical latches, horizontal and vertical interlocks, and 4th add-on neutral switching poles provides maximum flexibility to meet a wide variety of application requirements.

AC and DC Control

Rated Operational Current I_e [A]	Ratings for switching AC motors - AC-2, AC-3									Auxiliary Contacts		Cat No.
40 °C	kW (50 Hz) ⁽¹⁾				Hp (60 Hz)				kW (50 Hz)			
AC-1 (690V)	230V	400V	500V	690V	200V	230V	460V	575V	400	N.O.	N.C.	
760	160	315	400	500	150	150	350	350	315	2	2	100-G550⊗22
1000	220	400	500	630	200	250	500	500	400	2	2	100-G700⊗22
1100	280	500	630	710	250	300	600	600	500	2	2	100-G860⊗22
1200	315	560	750	850	—	—	—	—	560	2 ⁽²⁾	2	⁽³⁾ 100-G1000⊗12
1350	375	710	900	1000	450	450	900	900	710	2	2	100-D1200⊗12

(1) Preferred values according to IEC 60072-1.

(2) 1 N.O. contact used in control circuit

(3) No UL/cUL

Coil Voltage Codes

The Cat. No. as listed is incomplete. Select a coil voltage code from the table below to complete the Cat. No. Example: 120V, 60 Hz: Cat. No. 100-G550⊗22 becomes Cat. No. 100-G550KD22.

AC Voltages [V], Conventional Coil		100...110	110...120	200...220	220...240	345...380	380...415	400...440	440...480
100-G550...100-G860	50/60 Hz	—	KD	—	KF	—	KN	—	KB
	DC	KD	—	KF	—	KN	—	KB	—

AC Voltages [V], Conventional Coil		110...115	110	220...230	220	240	380...400	440	480
100-G1000...100-G1200	50/60 Hz	KD	—	KF	—	KA	KN	KB	KU
	DC	—	ZD ⁽¹⁾	—	ZA ⁽¹⁾	—	—	—	—

(1) Consult your local Rockwell Automation sales office or Allen-Bradley distributor.

Specifications

Electrical Data

			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
AC-1, Three-phase Switching-IEC							
Ambient temperature: 40 °C							
I_e	≤690V	[A]	760	1000	1100	1200	1350
	≤230V	[kW]	303	398	438	478	538
	≤240V	[kW]	316	416	457	499	561
	≤400V	[kW]	527	693	762	831	935
	≤415V	[kW]	546	719	791	863	970
	≤500V	[kW]	658	866	953	1039	1169
	≤690V	[kW]	908	1195	1315	1434	1613
Ambient temperature: 60 °C							
I_e	≤690V	[A]	605	800	870	960	1,085
	≤230V	[kW]	241	319	347	382	432
	≤240V	[kW]	251	333	362	399	451
	≤400V	[kW]	419	554	603	665	752
	≤415V	[kW]	435	575	625	690	780
	≤500V	[kW]	524	693	753	831	940
	≤690V	[kW]	723	956	1040	1147	1297
Continuous Current- UL/CSA General Purpose Rating 40 °C		[A]	520	700	810	—	1215
Switching of 3-phase Motors-IEC							
AC-2, AC-3	230/240V	[A]	550	700	860	1000	1200
50Hz/60°C	400/415V	[A]	550	700	860	1000	1200
	500V	[A]	550	700	860	1000	1200
	690V	[A]	500	630	700	860	1000
	230V	[kW]	179	228	280	326	391
	240V	[kW]	187	238	293	340	408
	400V	[kW]	312	414	509	592	710
	415V	[kW]	324	430	528	628	737
	500V	[kW]	407	518	636	756	888
	690V	[kW]	510	657	730	897	1043
AC-4 at 200 000 operations							
50Hz	230/240V	[A]	140	180	210	260	300
	400/415V	[A]	140	180	210	260	300
	230V	[kW]	45	57	67	83	97
	240V	[kW]	47	60	70	87	101
	400V	[kW]	78	101	118	146	170
	415V	[kW]	81	105	122	151	176
AC-4, Squirrel-cage motors with reversing and jogging at 20,000 (25,000), operations							
	230/240V	[A]	360	430	520	(630)	(700)
	400/415V ⁽¹⁾	[A]	350	420	520	(630)	(700)
	230V	[kW]	116	139	170	(205)	(228)
	240V	[kW]	120	151	177	(214)	(245)
	400V	[kW]	198	238	295	(357)	(414)
	415V	[kW]	206	247	300	(359)	(424)

(1) At rated Voltage 415V and rated current: Lifespan ~25%.

			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Switching of 3-phase Motors-UL/CSA							
60Hz/60°C	200V	[A]	414	552	692	—	1185
	230V	[A]	360	602	722	—	1130
	460V	[A]	414	590	708	—	1062
	575V	[A]	336	472	576	—	864
	200V	[Hp]	150	200	250	—	450
	230V	[Hp]	150	250	300	—	450
	460V	[Hp]	350	500	600	—	900
	575V	[Hp]	350	500	600	—	900
Rated making capacity							
AC-3 I_e	≤415V	[A]	5500	7000	8600	10000	12000
	≤500V	[A]	5500	7000	8600	10000	12000
	≤690V	[A]	5500	7000	8600	10000	12000
Rated making capacity							
AC-3 I_e	≤240V	[A]	4400	5600	6900	8000	9600
	≤400V	[A]	4400	5600	6900	8000	9600
	≤415V	[A]	4400	5600	6900	8000	9600
	≤500V	[A]	4400	5600	6900	8000	9600
	≤690V	[A]	4000	5100	5600	6900	8000
Star-Delta Starting							
50 Hz	230V	[A]	953	1212	1490	1732	2078
	240V	[A]	953	1212	1490	1732	2078
	400V	[A]	953	1212	1490	1732	2078
	415V	[A]	953	1212	1490	1732	2078
	500V	[A]	953	1212	1490	1732	2078
	690V	[A]	831	1091	1195	1490	1732
	230V	[kW]	310	395	485	565	677
	240V	[kW]	324	412	507	589	707
	400V	[kW]	540	717	882	1025	1250
	415V	[kW]	561	745	915	1088	1278
	500V	[kW]	705	897	1102	1309	1538
	690V	[kW]	883	1138	1247	1554	2078
Wye-Delta Starting							
60 Hz	230V	[Hp]	250	400	500	650	750
	460V	[Hp]	600	800	1000	1300	1500
	575V	[Hp]	600	800	1000	1500	1500
Short-circuit Protection of Contactors without Overload Relay							
Fuse gG (aM) Type 1 coordination (per IEC 60947-4-1)	500V	[A]	(630)	800	1000	1000	1250
	690V	[A]	(630)	800	1000	1000	1000
Switching of Three-phase Capacitor Inductivity of dispatching between parallel switched capacitor: min. 6 pH							
Single capacitors — 40 °C	230V	[kVar]	180	220	250	290	330
	240V	[kVar]	200	250	300	325	360
	400V	[kVar]	320	400	450	500	575
	415V	[kVar]	350	430	500	550	630
	500V	[kVar]	450	520	600	660	750
	690V	[kVar]	580	700	800	875	1000

			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Single capacitors — 55 °C	230V	[kVar]	150	180	220	275	325
	240V	[kVar]	170	200	260	300	350
	400V	[kVar]	280	330	400	460	550
	415V	[kVar]	300	360	450	500	600
	500V	[kVar]	360	420	540	600	720
	690V	[kVar]	500	580	720	800	950

Cat. No.			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Ratings for Switching Capacitor Banks							
40 °C	230V	[kVar]	180	220	250	290	330
	240V	[kVar]	200	250	300	325	360
	400V	[kVar]	320	400	450	500	575
	415V	[kVar]	350	430	500	550	430
	500V	[kVar]	450	520	600	660	750
	690V	[kVar]	580	700	800	875	1000
55 °C	230V	[kVar]	150	180	220	275	325
	240V	[kVar]	170	200	260	300	350
	400V	[kVar]	280	330	400	460	550
	415V	[kVar]	300	360	450	500	600
	500V	[kVar]	360	420	540	600	720
	690V	[kVar]	500	580	720	800	950

DC Switching

Switching of non-or slightly inductive loads, resistance furnaces; DC-1 at 60°C

1 Pole	24/48V	[A]	645	760	930	1020	1150
2 Poles in series	24/48V	[A]	645	760	930	1020	1150
3 Poles in series	24/48V	[A]	645	760	930	1020	1150
	110V	[A]	480	560	630	800	900
	220V	[A]	315	400	450	500	600

Shunt-Wound Motors

Starting, plugging, reversing, plugging; DC-3 at 60 °C

3 Poles in series	24/48V	[A]	605	800	870	960	1085
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Series-Wound Motors

Starting, plugging, reversing, plugging; DC-5 at 60°C							
3 Poles in series	24/48V	[A]	605	800	870	960	1085

Lighting Loads; Elec.Discharge.Lamps-AC-5a,

Non-Compensated	[A]	450	570	700	850	1000
Compensated	[A]	360	460	550	660	800
Incandescent Lamps-AC-5b, Electrical Endurance @100000 ops	[A]	315	440	500	560	630

Switching Power Transformers AC-6a

Inrush = $n \cdot I_e$		[A]	7440	9450	11700	13500	16200
I_e Rated transformer current		[A]	248	315	390	450	540
n=30	400VAC	[kVA]	172	218	270	312	374
	500VAC	[kVA]	215	273	338	390	468
	690VAC	[kVA]	269	339	376	538	645
n=20		[A]	371	472	580	675	810
n=15		[A]	435	630	774	900	1080

Cat. No.			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Rated Short-Time Withstand, I_{CW} 60 °C							
	1s	[A]	5500	7000	8000	10000	12000
	4s	[A]	5500	7000	8000	10000	12000
	10s	[A]	4400	5600	6900	8000	9600
	15s	[A]	3800	5000	6000	7400	8500
	60s	[A]	2300	2800	3400	4000	4800
	240s	[A]	1300	1800	2000	2300	2700
	900s	[A]	850	1150	1350	1600	1900
Minimum cooling time at zero current		[Min.]	60	60	60	60	60
Resistance and Energy Dissipation							
Main circuit resistance		[mΩ]	0.11	0.1	0.08	0.06	0.05
Total energy dissipation at I_e AC-3		[W]	99	147	177	180	216
Excess energy dissipation at I_e AC-3	AC Control	[W]	110	172	202	250	286
	DC Control	[W]	109	169	199	240	276

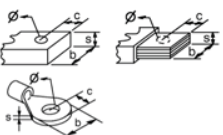
Mechanical Data

Cat. No.			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Mechanical Life	AC Control	[Million operations]	5	5	5	1	1
	DC Control	[Million operations]	5	5	5	1	1
Shipping Weights	AC Control	[kg]	13.8	26.4	28.4	50.3	53.4
		[lb]	30.4	58.1	62.5	110.8	117.6
	DC Control	[kg]	13.8	26.4	28.4	50.3	53.4
		[lb]	30.4	58.1	62.5	110.8	117.6

Terminals

Terminal Dimensions	[mm]	6 x 40	8 x 50	8 x 50	10 x 50	10 x 60
Terminal screw hole size	[mm]	(1) x Ø13	(1) x Ø13	(1) x Ø15	(2) x Ø13	(2) x Ø13
Terminations-Power Type	Hexagonal Bolt					

Direct Connection

	b max.	[mm]	50	60	60	60	60
	c max.	[mm]	20	20	25	25	25
	s max.	[mm]	2x5	2x5	2x6	2x6	2x8
	Ø min.	[mm]	12.5	13	15	2x13	2x13
Recommended Torque	[N·m]		50	60	75	60	60
	[ft.-lb]		37	44	55	44	44

Conductor/Wire Terminations

Busbar (Width)	[mm]	40	50	50	50	60
Hex screw	[in]	1/2	3/8	3/8	3/8	3/8
Recommended Torque	[N·m]	42	62	62	56	56
	[lb·in]	375	550	550	500	500
Auxiliary Contact	[mm ²]	(2) x 2.5	(2) x 2.5	(2) x 2.5	(2) x 2.5	(2) x 2.5
Coils	[mm ²]	(2) x 2.5	(2) x 2.5	(2) x 2.5	(2) x 2.5	(2) x 2.5

Coil Data

Cat. No.		100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Operating Limits						
AC-50 Hz	Pick-up	[x U_s]	0.85...1.1			
	Drop-out	[x U_s]	0.2...0.5	0.2...0.75		0.1...0.6
AC-60 Hz	Pick-up	[x U_s]	0.85...1.1			
	Drop-out	[x U_s]	0.2...0.5	0.2...0.75		0.1...0.6

Cat. No.			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
DC Control	Pick-up	[x U _s]	0.85...1.1				
	Drop-out	[x U _s]	0.2...0.5	0.2...0.75		0.1...0.6	
Pickup and Holding Power							
AC-50 Hz	Pick-up	[VA]	800...950	1350...1600		2400	
	Hold-in	[VA]	9...11	21...25		70	
AC-60 Hz	Pick-up	[VA]	800...950	1350...1600		2400	
	Hold-in	[VA]	9...11	21...25		70	
DC Control	Pick-up	[W]	700...850	1300...1550		2100	
	Hold-in	[W]	8...10	18...22		60	
Operating Times: Switching Delay							
AC	Making delay	[ms]	50...100			50...100	
	Breaking delay	[ms]	20...50 ⁽¹⁾ /150...200/500...1000 ⁽²⁾			25...50	
DC	Making delay	[ms]	50...100			50...100	
	Breaking delay	[ms]	20...50 ⁽¹⁾ /150...200/500...1000 ⁽²⁾			25...50	

(1) Accelerates

(2) Delays

Auxiliary Contacts

Cat. No.			100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Switching of AC Loads							
AC-1 I_{th}	at 40 °C	[A]	16			16	
	at 60 °C	[A]	12			12	
AC-15 at rated voltage	120V	[A]	6			6	
	230V	[A]	3			3	
	240V	[A]	3			3	
	400V	[A]	2			2	
	415V	[A]	2			2	
	500V	[A]	1.5			1.5	
	690V	[A]	1			1	
Switching of DC Loads							
DC-13 control of electromagnets	2V DC	[A]	6			6	
	48V DC	[A]	3			3	
	110V DC	[A]	1			1	
	220V DC	[A]	0.5			0.5	
Back-up Fuse Short-circuit protection without contact welding per IEC60947-5							
Fuse gG		[A]	10			16	

General

Cat. No.		100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Rated Isolation Voltage U _i						
IEC, AS, BS, SEV, VDE, 0660	[V]	1,000			690	
UL, CSA	[V]	600			600	
Rated Impulse Voltage Withstand U _{imp}						
1minute per IEC947-4	[KV]	8			2,5	
Rated Voltage-Main Control U _e						
AC, 50/60Hz	[V]	230, 240, 400, 415, 460, 500, 575, 690V			230, 240, 400, 415, 460, 500, 575, 690V	
DC		24, 48, 110, 220, 440V				
Operating Frequency for AC Loads, 50/60 Hz	[Hz]	180/hr. for 0.25 s start time-42/hr. for 1s start time				
Insulation Class of the Magnetic Coil		Class B per VDE 0660, table 22				
Rated frequency of the Coil		AC 50/60 Hz, DC				
Ambient Temperature						

Cat. No.	100-G550...	100-G700...	100-G860...	100-G1000	100-G1200
Storage	-40 °C...+ 80 °C				
Operation at rated current	-25 °C...70 °C				
Climatic Withstand	Damp alternating conditions cyclical, per DIN 50016 and 40046, part 38, IEC 60068				
Altitude	2000 m above sea level, per IEC60947-1				
Type of Protection	IP00 IEC 60529/DIN 40050				

Standards Compliance and Certifications

Standards Compliance	Certifications
EN/IEC 60947-4-1	CE Marked
IEC 60947 Type "1" Coordination	cULus Listed (File No. E 3125, Guide NLDX, NLDX7)
CSA C22.2 No. 14	
UL 508	

Life-Load Curves

100-G550...100-G1200

Figure 36 - AC-3 Switching of Running Three-phase Motors, $U_e = 380...460V$ AC; AC-1 Non or Slightly Inductive Loads, Resistance Furnaces

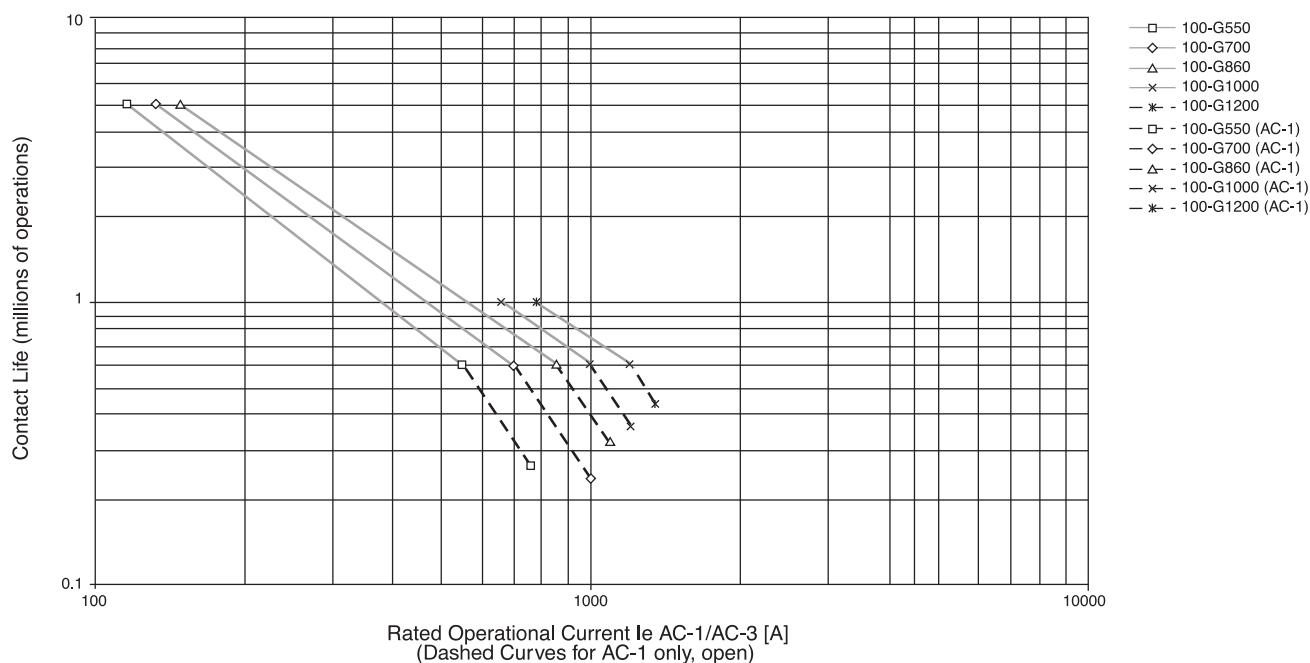


Figure 37 - AC-4 Jogging of Squirrel-cage Motors, $U_e = 380...460V$ AC

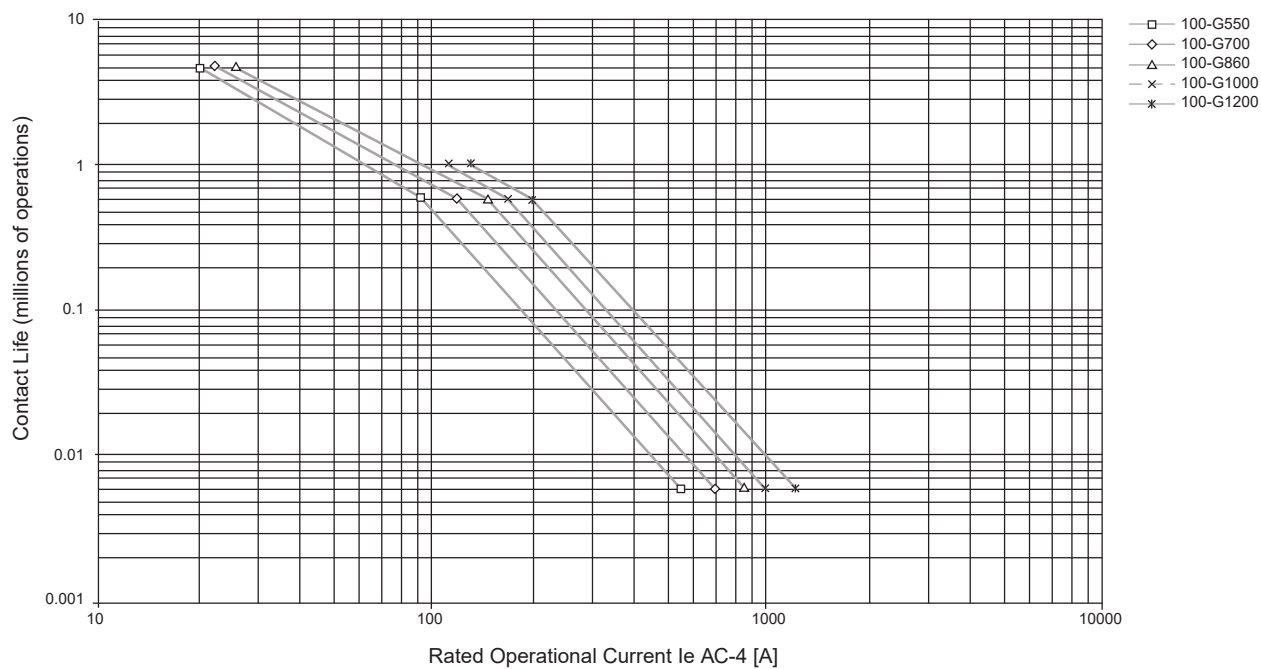
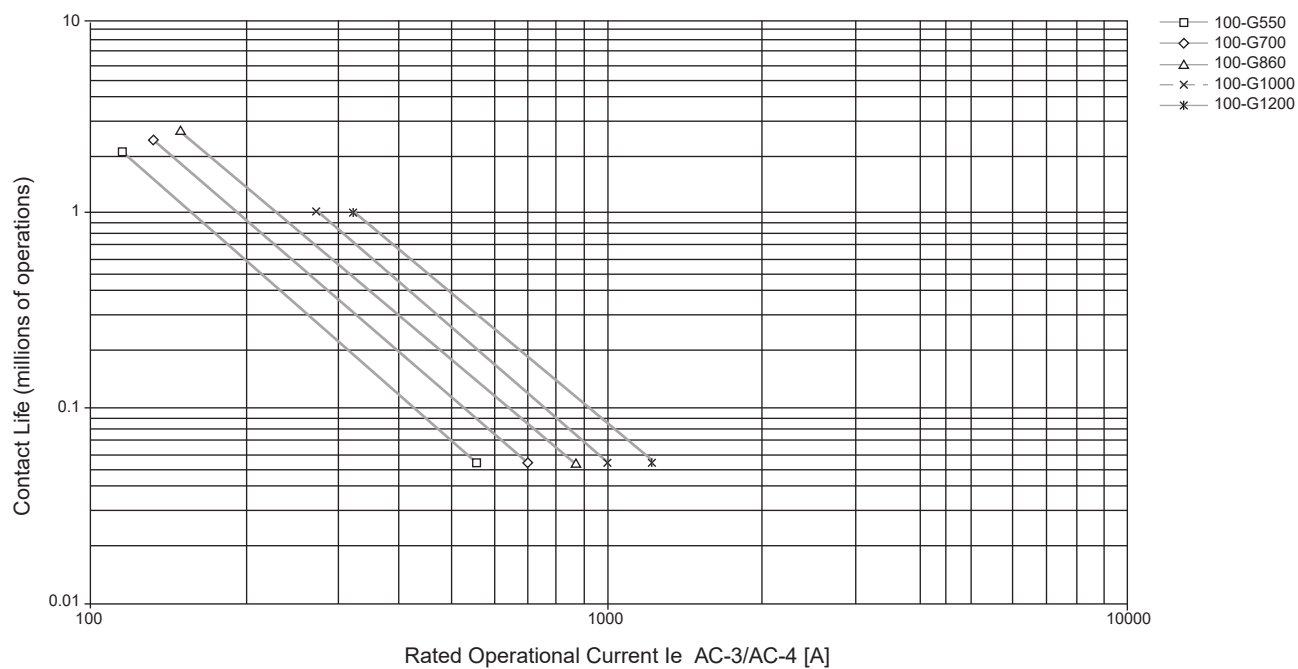


Figure 38 - AC-3 90% Switching of Running Motors, $U_e = 380...460V$ AC; AC-4 10% Jogging



Permissible Switching Rate

100-G550...100-G1200

Figure 39 - Switching of Running Squirrel-cage Motors AC-3, $U_e = 380...460V$ AC; Starting Time $t_s = 0.25$ s, Relative Running Time 40%

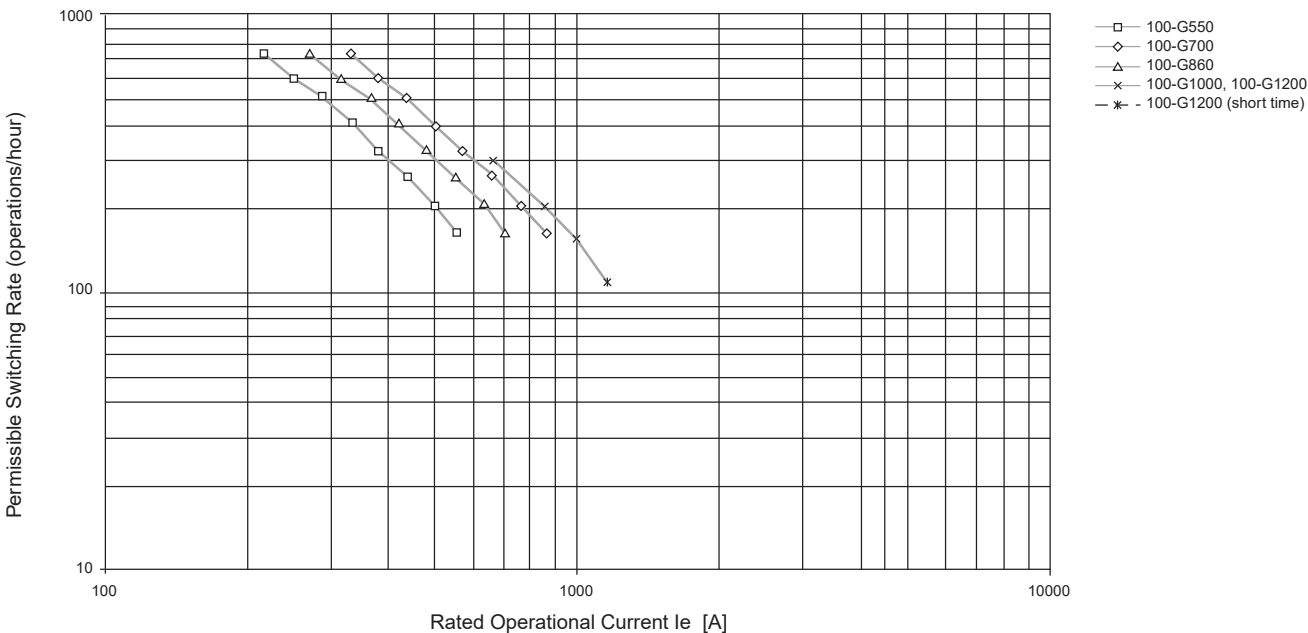


Figure 40 - Switching of Running Squirrel-cage Motors AC-3, $U_e = 380...460V$ AC; Starting Time $t_s = 1$ s, Relative Running Time 40%

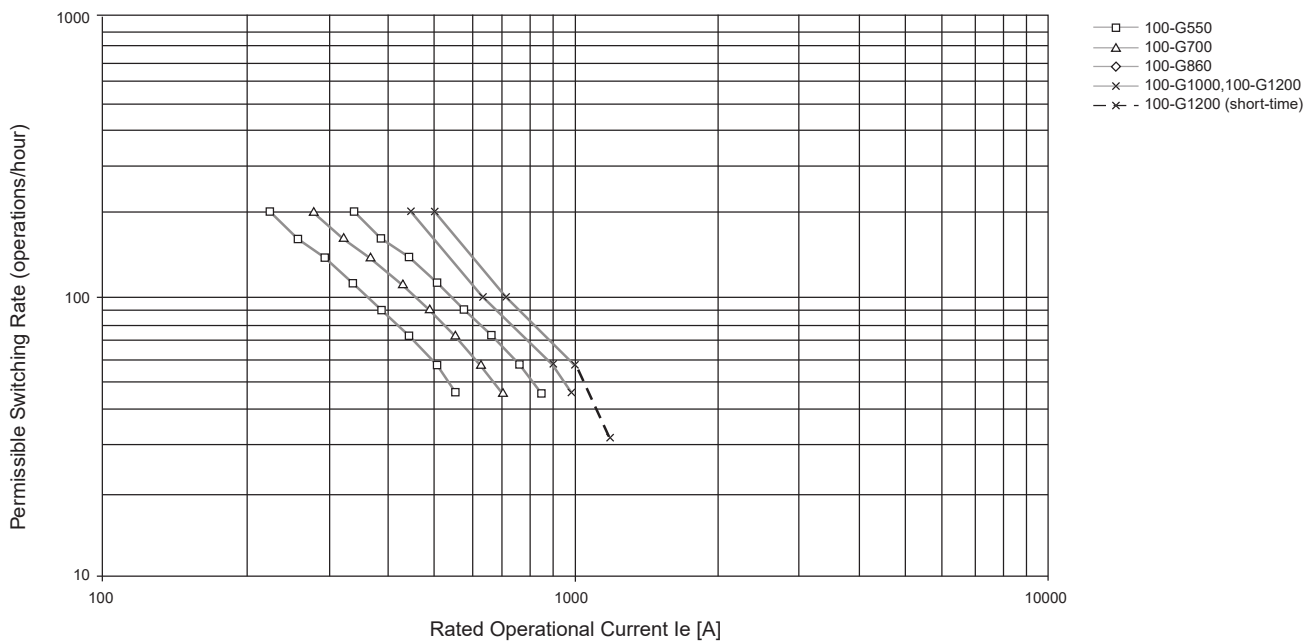
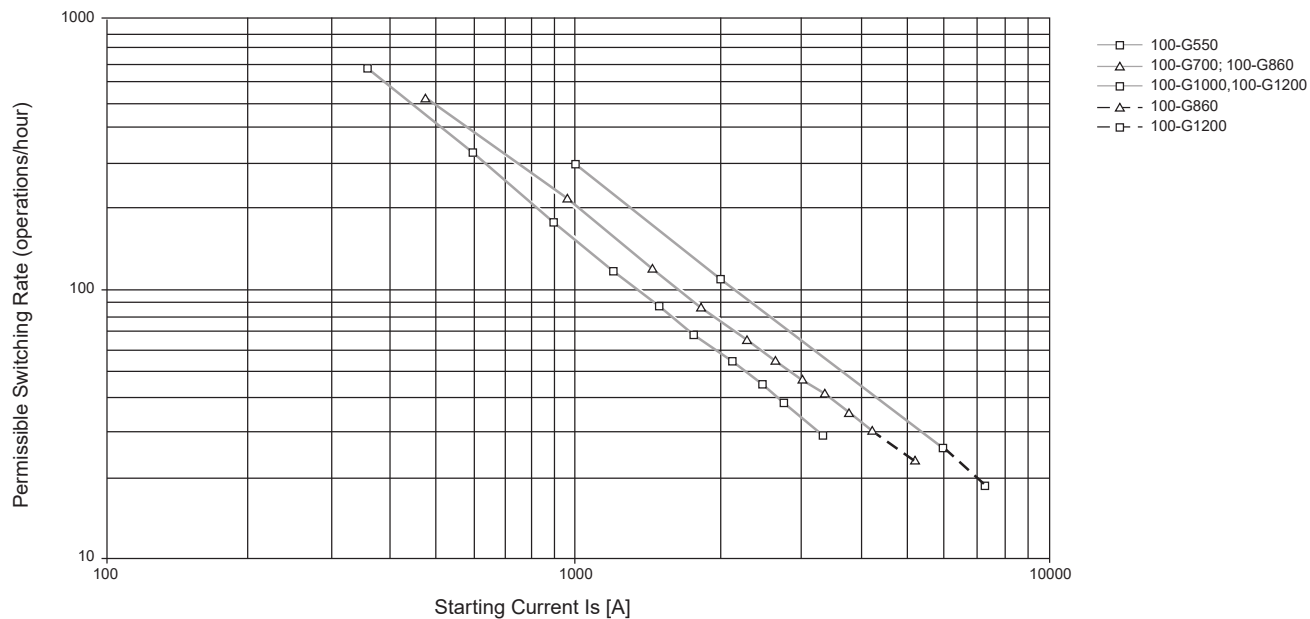


Figure 41 - Switching of Starting Motors (AC-2, and AC4) $U_z = 380 \dots 460V$ AC; Starting Time $t_{ed} = 1\text{ s}$, ($< t_s$)



Approximate Dimensions

Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.

Figure 42 - Bulletin 100-G Contactors and Accessories

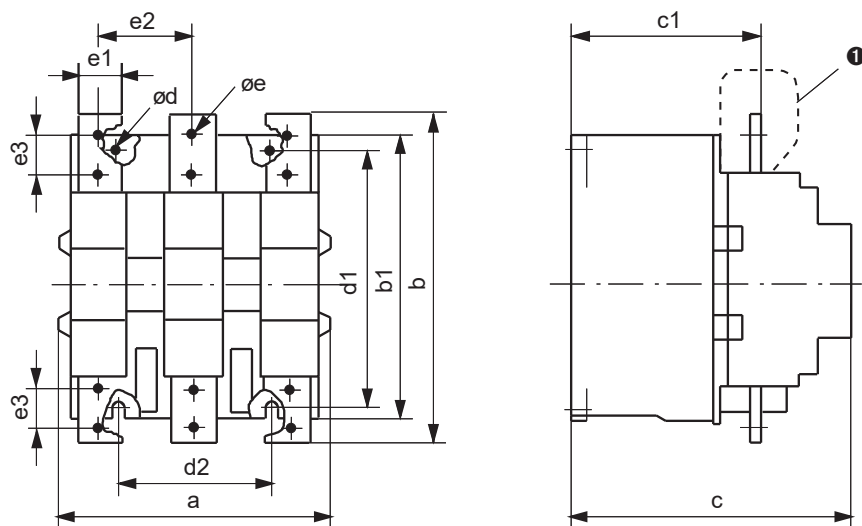
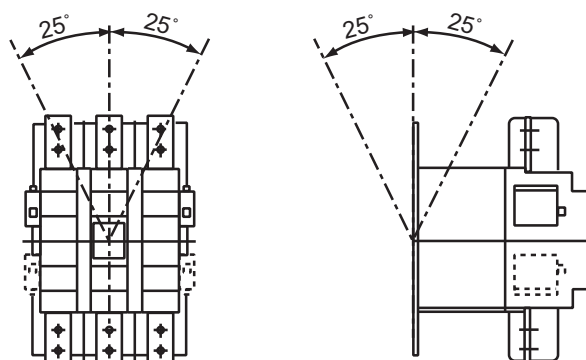


Figure 43 - Mounting Position



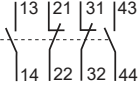
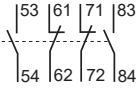
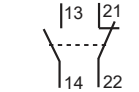
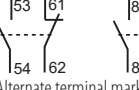
AC and DC Contactors

Cat. No.	a	b	b1	c	c1	Ø d	d1	d2	Ø e	e1	e2	e3
100-G550	220	258	228	225	164	9	220	110	12.5	40	79	—
100-G700	280	307	277	291	203	11	280	175	13	50	101	—
100-G860	280	361	325	291	203	11	280	175	15	50	101	—
100-G1000	334	490	434	345	231	13.5	380	120	2x13	50	100	40
100-G1200	334	490	434	345	231	13.5	380	120	2x13	60	100	40

Contactors with Accessories

Contactor with			mm
Auxiliary contact block			a
Mechanical Interlock	side by side	100-G550/100-G550	a+42+a
		100-G700, -860/100-G700, -860	a+32+a
		100-G1000, -1200/100-G1000, -1200	a+46+a
		100-G550/100-G700, -860	a+37+a
		100-G700, -860/100-G1000, -1200	a+73+a
	stacked vertically	100-G550/100-G550	b+56 + b
		100-G700, -860/100-G700, -860	b/2+380...480+b/2
		100-G1000, -1200/100-G1000, -1200	b+120...170+b
		100-G550/100-G700, -860	b/2+400+b/2
		100-G700, -860/100-G1000, -1200	b/2+570+b/2
4th add-on neutral switching pole		100-G550	a+74
		100-G700, -860	a+68
		100-G1000, -1200	a+76
Mechanical latch		100-G550	b+59
		100-G700	b+64
		100-G860	b+37

Accessories

	Description	For Use With	Cat. No. ⁽¹⁾
	Auxiliary Contact Block - For mounting between T1 & T2 or between T2 & T3 - Adjustable; provides normal, delayed, or overlapping contacts - Max. two blocks/contact - Alternate terminal marking tags included 2 N.O. and 2 N.C. contacts	 Standard terminal marking for mounting between T1 & T2  Alternate terminal marking for mounting between T2 & T3	100-G550...100-G860 100-EF22
	Auxiliary Contact Block - For side mounting on either side of the contactor - Max. four blocks/contact - Alternate terminal marking tags included 1 N.O. and 1 N.C. contact	 Standard terminal marking  Alternate terminal markings	100-G1000...100-G1200 100-EB11
	Fourth Add-On Neutral Switching Pole - Left- or right-side mountable - Note: no UL/cUL	I_{th} AC-1 500 A	100-G500 100-NP800-5
			100-G700, 100-G860 100-NP800-6
		I_{th} AC-1 1000 A	100-G700, 100-G860 100-NP1000-6
			100-G1000, 100-G1200 100-NP1000-7
	Mechanical Latch - Mechanical life: 0.5 million operations - Direct and impulse Control	Direct and Impulse Contact control	100-G550 100-FLAM5⊗
		Direct and Impulse Contact control	100-G700, 100-G860 100-FLAM6⊗
	Mechanical Interlock — Horizontal	100-G550 to 100-G550	100-MC00-5H
		100-G550 to 100-G700 or 100-G860	100-MC00-56H
		100-G700 or 100-G860 to 100-G700 or 100-G860	100-MC00-6H
		100-G700 or 100-G860 to 100-G1000 or 100-G1200	100-MC0067H
		100-G1000 or 100-G1200 to 100-G1000 or 100-G1200	100-MC00-7H
	Mechanical Interlock — Vertical	100-G550 to 100-G550	100-MC00-5V
		100-G550 to 100-G700 or 100-G860	100-MC00-56V
		100-G700 or 100-G860 to 100-G700 or 100-G860	100-MC00-6V
		100-G700 or 100-G860 to 100-G1000 or 100-G1200	100-MC0067V
		100-G1000 or 100-G1200 to 100-G1000 or 100-G1200	100-MC00-7V

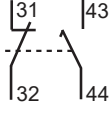
(1) Package Quantity = 1

Coil Voltage Codes

The Cat. No. as listed is incomplete. Select a coil voltage code from the table below to complete the Cat. No.
Example: Cat. No. 100-FLAM5⊗ becomes Cat. No.100-FLAM5KD.

For Use With	[V]	110...120	220...240	380...415	440...480
100-G550...-G860	50/60 Hz	KD	KF	KN	KB

Renewal Parts

	Description	For Use With	Cat. No.
		100-G550	100-AC550
 Arcing Chamber For 3 poles		100-G700, 100-G860	100-AC860
 Main Contact Set Set for 1 pole		100-G550	100-CP550
		100-G700	100-CP700
		100-G860	100-CP860
		100-G1000	100-CP1000
		100-G1200	100-CP1200
 Auxiliary Contact Block - Special 2-pole design: 1 N.O. delayed make, 1 N.C. contact - N.O. delayed make contact used for operation of the Feeder/Group Coil mechanism - One contact block supplied standard with contactor		100-G1000, 100-G1200	100-EB11DC

Coils and Supply Modules



AC Standard Control Voltages	DC Standard Control Voltage	Coil Code	100-G550		100-G700...100-G860	
50/60 Hz			Cat. No.	Cat. No.	Cat. No.	Cat. No.
110...120V	100...110V	KD	TX734	TXS734	TY734	TYS734
220...240V	200...220V	KF	TX747	TXS747	TY747	TYS747
380...415V	345...380V	KN	TX779	TXS779	TY779	TYS779
440...480V	400...440V	KB	TX780	TXS780	TY780	TYS780

AC Standard Control Voltages	Coil Code	100-G1000...100-G1200	
50/60 Hz		Coil Cat. No. ⁽¹⁾	Supply Module Cat. No.
110...115V	KD	TZ734	TZS734
220...230V	KF	TZ747	TZS747
380...400V	KN	TZ779	TZS779
440V	KB	TZ780	TZS780
480V	KU	TZ781	TZS781

(1) Coils sold in pairs.

Notes:

Rockwell Automation Support

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	www.rockwellautomation.com/knowledgebase
Local Technical Support Phone Numbers	Locate the phone number for your country.	www.rockwellautomation.com/global/support/get-support-now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	www.rockwellautomation.com/global/support/direct-dial.page
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