



CHASSIS CONTROLS FOR PMDC MOTORS

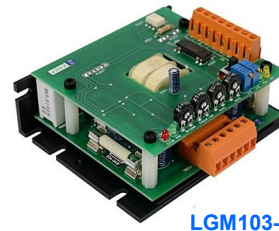
SCR 115/230V. CHASSIS



The **LGC series** is a versatile drive for 90/180 VDC brushed DC or shunt wound motors. Standard features: On-board trim pots for max/min speed, accel/decel, current limit, speed regulation, & field supply for shunt-wound motors. Switchable 115/230V input!



[LGC400-10](#)



[LGM103-10](#)



[MGC403-11](#)

RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-180 VDC OUTPUT

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
LGC400-10	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	206
HEAT SINK NO. 223-0159				MOUNTING DIMENSIONS: 2.5" L X 3.8" W (63 mm L X 97 mm W)					79

FEATURES

- Selectable open or close to inhibit
- Inhibit to zero or minimum speed
- Selectable Torque or Speed mode operation
- Potentiometer Kit 202-0031 is included with LGD400-10

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
LGD400-10	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	206
HEAT SINK NO. 223-0159				MOUNTING DIMENSIONS: 2.5" L X 3.8" W (63 mm L X 97 mm W)					79

FEATURES

- Separate models for 115 or 230 VAC power supply
- isolated inputs accept various input sources for inhibit
- Accepts grounded 4-20 mA or 0-10 VDC signal
- Status LEDs allow for convenient monitoring

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
LGM103-10	.50	5	1.0	10					501
LGM303-10					1.0	5.0	2.0	10.0	530
HEAT SINK NO. 223-0159				MOUNTING DIMENSIONS: 2.5" L X 3.8" W (63 mm L X 97 mm W)					79

REGEN CHASSIS DRIVE

FEATURES

- 4-Quadrant contactor-less braking / instant reversing
- 3-Wire Start/Stop: Inhibit and Enable
- Custom programmable for OEMs
- Modes: Speed, torque, linear torque, cycling, positioning

RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-180 VDC OUTPUT

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
MGC403-11	.75	8.0	1.0	11.0	1.5	8.0	2.0	11.0	394
HEAT SINK NO. 223-0159				MOUNTING DIMENSIONS: 2.5" L X 3.8" W (63 mm L X 97 mm W)					79

PWM CHASSIS DRIVE

FEATURES

- 4-Quadrant contactor-less braking / instant reversing
- Isolated inputs: Accepts: f0 ± 5 VDC, 0 ± 10 VDC or 4-20 mA.
- Modes: Speed, torque, linear torque, cycling, positioning
- Custom programmable for OEM's.

PMB703-7



RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-130, 0-180 VDC OUTPUT

MODEL	90 VDC		130 VDC		180 VDC		NOTE	LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS		
PMB703-7	.66	5.5/7.0*	1.0	5.5/7.0*	1.33	5.5/7.0*	*When mounted to allow upwards air-flow through the heat sink fins. De-rate to 5.5 amps when mounted in any other configuration	907
HEAT SINK NO. - N/A				MOUNTING DIMENSIONS: 5.5" L X 5.16" W (140 mm L X 131 mm W)				

FEATURES NEMA 1 DRIVES - Unidirectional & Reversing

- **NEMA 1 Enclosure:** Prevents accidental contact with the circuit board
- **Field Supply:** Voltage output to energize the field winding of a shunt-wound motor
- **Diagnostic LEDs:** Current Limit
- **Case LEDs:** Power
- **Pre-Wired Switches:** ON/OFF
- **Stopping Modes:** Inhibit (N.O.) for coasting to a stop. Can be used for frequent starting and stopping



[LGC410-10](#)
[LGD410-10](#)



[LGC430-10](#)
[LGD430-10](#)

RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-180 VDC OUTPUT

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
LGC410-10 Unidirectional	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	409
	HEAT SINK NO. 223-0174				OUTSIDE DIMENSIONS: 8.0" H X 6.0" W (203 mm H x 125 mm W)				102
LGC430-10 Reversing	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	533
	HEAT SINK NO. 223-0174				OUTSIDE DIMENSIONS: 8.0" H X 6.0" W (203 mm H x 125 mm W)				102

FEATURES

- Selectable open or close to inhibit
- Inhibit to zero or minimum speed
- Selectable Torque or Speed mode operation
- Remote Signal: 0-2.5 VDC

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
LGD410-10 Unidirectional	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	437
	HEAT SINK NO. 223-0174				OUTSIDE DIMENSIONS: 8.0" H X 6.0" W (203 mm H x 125 mm W)				
LGD430-10 Reversing	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	531
	HEAT SINK NO. 223-0174				OUTSIDE DIMENSIONS: 8.0" H X 6.0" W (203 mm H x 125 mm W)				102

NEMA 1 REGENERATIVE DRIVE

FEATURES

- **4Q Reversing:** Regenerative / 4-Quadrant drives have the ability to perform quick contactor-less braking and/or reversing-on-the-fly/inhibit to zero or minimum speed
- **Tach Feedback:** Accepts tachogenerator feedback for tighter speed regulation
- **Diagnostic LEDs:** Power, Forward Current Limit, Reverse Current Limit, Forward Direction, Reverse Direction
- **Field Supply Voltage** output for shunt-wound motor



MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
RGD410-10 Regenerative	.5	5.0	1.0	10.0	1.0	5.0	2.0	10.0	998
	HEAT SINK NO. 223-0174				OUTSIDE DIMENSIONS: 8.0" H X 6.0" W (203 mm H x 125 mm W)				102



NEMA 4X CASED SCR FOR PMDC MOTORS



[PAT440-10](#)
[PAT450-10](#)
(Plastic Enclosure)



[LGC440-10](#)
[LGP443-10](#)
(Metal Enclosure)

FEATURES

- NEMA 4X METAL Enclosure: Water resistant and dust proof enclosure
- NEMA 4X PLASTIC Enclosure: Plastic corrosion resistant weatherproof enclosure that protects against dirt and splashing
- Factory installed heat sink
- Reversing or non-reversing
- Diagnostic LEDs: Current Limit, Power
- Field supply for shunt wound
- Pre-Wired Switches: ON/OFF
- Inhibit (N.O) for coasting to a stop. Can be used for frequent starting and stopping

RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-180 VDC OUTPUT

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
PAT440-10 Unidirectional	Heat sink included		1.0	10.0	Heatsink included		2.0	10.0	535
LGC440-10 Unidirectional			1.0	10.0			2.0	10.0	658
PAT450-10 Reversing			.75	10.0			1.5	10.0	714

MOUNTING DIMENSIONS: 5.5" L X 5.16" W (140mm L X 131mm W)

FEATURES

- NEMA 4X METAL Enclosure: Water resistant and dust proof enclosure
- Isolated: Accepts grounded 0-10VDC or 4-20 mA
- Manual /Signal / Ratio Mode: Jumper selectable to follow a potentiometer, and analog signal, or an analog signal with a potentiometer to set a ratio

RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-180 VDC OUTPUT

MODEL	W/O HEAT SINK 90 VDC		WITH HEAT SINK 90 VDC		W/O HEAT SINK 180 VDC		WITH HEAT SINK 180VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
LGP443-10 Unidirectional	Heat sink included		.75	10.0	Heatsink included		1.5	10.0	1031

MOUNTING DIMENSIONS: 5.5" L X 5.16" W (140mm L X 131mm W)

FEATURES

- Factory installed heat sink
- Reversing or non-reversing
- Diagnostic LEDs: Current Limit, Power
- Field supply for shunt wound
- Jog Mode: Dedicated circuitry for a jog setup
- Pre-Wired Switches: ON/OFF
- Inhibit (N.O) for coasting to a stop. Can be used for frequent starting and stopping

[PWL440-10](#)



RATINGS - 115/230/1/60 VAC INPUT, 0-90, 0-130, 0-180 VDC OUTPUT

MODEL	90 VDC		130 VDC		180 VDC		LIST
	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	MAX. HP	MAX. AMPS	
PWL440-10	1.0	10.0	1.5	10.0	3.0	5.5/7.0*	1166

HEAT SINK NO. - N/A

MOUNTING DIMENSIONS: 7.0" L X 6.3" W (178 mm L X 160 mm W)

All ACE products are designed and built in their United States facility, which is both ISO 9001:2008 registered and UL508A certified. In addition, ACE controls are listed with the following approval organizations.



This page is a tool to help cross other DC drives to ACE / Minarik DC Drives. This cross reference includes some of the more common drives from manufacturers such as KB Electronics, Dart Controls, Baldor, Bodine, and Grainger. The cross reference isn't always exact. Contact AG-I if your drive isn't listed below, or if you have questions about the differences between drives.

KB Electronics™ → Minarik Drives

KBBC Series	→	DC30-12/24-4Q
KBIC Series	→	MM23001C
KBMD Series	→	MM23101C or MM23201C
KBMG Series	→	RG60U
KBMM Series	→	MM23001C
KBPB Series	→	RG60U
KBSI-240D	→	PCM4
KBRG-212D	→	RG500UA
KBRG-240D	→	RG500UA
KBRG-255	→	RG5500U
KBWD Series	→	MMXL Series
SI Series	→	Models starting with "PCM"

Grainger® → Minarik Drives

2M510	→	MM23001C
2M511	→	MC10
5JJ51	→	DC30-12/24-4Q
5JJ56	→	MM31750B
5JJ57	→	MM31750B
5JJ58	→	MM23101C
5JJ59	→	MM23021C
6Z385	→	MM23001C
6Z386	→	MC10
6Z387	→	MM23002D
6Z388	→	MC10

Baldor® → Minarik Drives

BC140	→	MM23101C
BC140-FBR	→	MM23201C
BC141	→	MM23001C
BC142	→	MM23001C
BC155	→	MM501U
BC154	→	MC10
BCWD140	→	MC10-R
BC200	→	RG500UA
BC202	→	RG500UA
BC203	→	RG5500U
BC204	→	RG60U
BC254	→	RG500A
BC354	→	C4XL3200A

A.C.E. → Minarik Drives

ELC110-5	→	C1EC2
LGC400-10	→	MM23001C
LGC410-1.5	→	MM23111C
LGC410-10	→	MM23101C
LGC430-10	→	MM23201C
LGC440-10	→	MM23401C
LGD400-10	→	MM23002D
LGD410-1.5	→	MM23112D
LGD410-10	→	MM23102D
LGD430-1.5	→	MM23212D
LGD430-10	→	MM23202D
LGM103-10	→	MM10-115AC-PCM
LGP101-10	→	PCM21000A
LGP443-10	→	PCM23401A
MGB400-11	→	MGB400-11-00MD
MGC403-11	→	MGC403-11-00MD
MHS403-10	→	MM301U
PAT440-10	→	MC10
SPM100-3-PT3	→	RD16U

Dart Controls™ → Minarik Drives

125DV-C	→	MM23001C or MM23001C-Q
15DV Series	→	MM31750B
253G-200C	→	MM23001C
253G-200E	→	MM23401C or MC10
530BC	→	MM23002D
530BRE	→	MC10
VSI	→	PCM4
MD Series	→	DLC600 & drive

Bodine® → Minarik Drives

0780	→	MMXL02-D240AC
0781	→	MMXL05-D240AC
0790	→	C1XP01-115AC-A
0791	→	C1XP03-115AC-A
0865	→	MM23001C
0867	→	MM23101C
1865	→	MC10