

HIGH TEMPERATURE

OIL & GAS APPLICATION

## OVERVIEW

Nar Motion L is a high-end motor controller that includes an internal low voltage power supplies which makes it the perfect match for an alternator active rectifier for autonomous power generation downhole.

## FEATURES

- DC input up to 600 V (survival 900 V)
- High power drives up to 5 kW continuous operation
- Maximum operating temp: 177 °C (350,6 °F)
- Field Oriented Control including multiple real-time limits (Speed, Torque and Power) and 4-quadrant operation
- Multiple rotor position sensors:
  - Sensorless
  - Hall effect
  - Resolver
- CAN bus communication (RS485 as an option)
- Very wide auxiliary (logic) input voltage compatible with 12 V, 24 V and 30 V buses

## CHARACTERISTICS

	Min	Typ	Max	Unit
Operating temperature	5		177	°C
Operating temperature	41		350	°F
Survival temperature	-40		185	°C
Survival temperature	-40		365	°F
Operating Input Voltage		450	600	V
Survival Voltage (<1s)	0		900	V
Auxiliary input voltage	12		32	V
Motor power			2000	W
Motor phase current			10	A <sub>PK</sub>
Switching frequency		10		kHz
CAN port baud rate		250		kbps
Lifetime below 125 °C		10,000		h
Lifetime at 125-150 °C		1,000		h
Lifetime up to 175 °C		200		H

### Resolver Option

	Min	Typ	Max	Unit
Excitation voltage			10	V <sub>PK-PK</sub>
Excitation frequency		10		kHz

### Hall effect Option

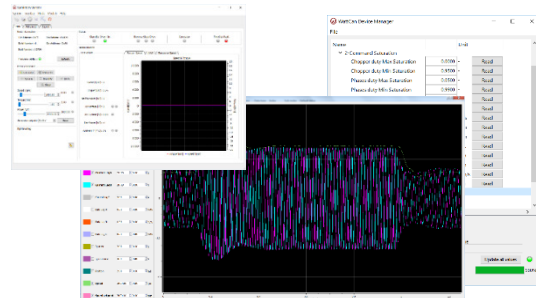
	Min	Typ	Max	Unit
Excitation voltage	4.5	5	5.5	V
Excitation current			20	mA



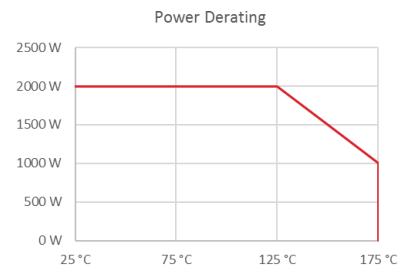
LxWxH (mm)  
400x40x30

## DIMENSION

Units	LxWxH
mm	400 x 40 x 30
inches	15.74 x 1.57 x 1.18



NarMonitor® GUI (licenses sold separately)



## Versions

	Rotor position sensor
NM-40-600-10-RESO	Resolver sensor
NM-40-600-10-HALL	Hall Effect sensor
NM-40-600-10-SLES	Sensorless

## NEW! NarMotion Demo Kit available

Including NM-40-600-10 driver, pre-wired connectors, BLCD motor, NarMonitor® license and a USB CAN transceiver.