

POWERCORE® **MPC-20**

Auto & manual start with various throttling options and real-time clock

Large, easy-to-read display, even in full sunlight

Easy-to-use configuration software

CAN J1939 communications



CONFIGURABLE, MULTIFUNCTION CONTROLLER FOR ELECTRONIC AND MECHANICAL ENGINES

Murphy's PowerCore MPC-20 is an all-purpose industrial controller that stands up to some of the harshest environments. This powerful controller is targeted for engine-driven pumps and irrigation, with the versatility to work in most engine-driven applications. MPC-20 is Tier 4 / Stage IV ready with auto and manual start, various throttling options and a real-time clock.

AVAILABLE AS A PANEL SOLUTION



Murphy's ML2000 control panel incorporates all the power and functionality of the PowerCore® MPC-20 in a panel solution for most any engine-driven application.

FOR MORE INFORMATION ABOUT ML2000, VISIT: WWW.MACQUARRIE.COM.AU









POWERCORE® MPC-20

MPC-20 DIMENSIONS

Please visit our Help Center for ML2000 dimensions







MPC-20 SPECIFICATIONS

DISPLAY		
SCREEN SIZE	3.8 inches	
TYPE	Monochrome LCD, transflective w/ white backlight	
RESOLUTION	320 x 240	
HARDWARE		
KEYPAD	11 tactile feedback buttons	
LEDs	(1) Red, shutdown, (1) Amber, warning, (1) Green, auto mode	
CONNECTORS	Delphi, SICMA 90 position	
COMMUNICATION		
CAN	(1) CAN 2.0B, 250 kbps, J1939	
SERIAL	RS-485, (MODBUS RTU)	
USB	Programming	

ELECTRICAL		
OPERATING VOLTAGE	8-32 VDC, reverse polarity & load dump protection	
TOTAL CURRENT CONSUMPTION	18W Max without 2 2A High-sides active 146W Max with 2 2A High-sides active	
INPUTS	(8) Analog configurable as resistive, 0-5VDC, 4-20mA or digital ground (6) Digital, configurable as battery or ground (1) Frequency, (2Hz–10kHz, 3.6 VAC-120 VAC)	
OUTPUTS	(2) 1A max low-side (2) 2A max high-side (2) 200mA max 5 VDC (1) 0-5 VDC analog (6) 10A max form C relays	

ENVIRONMENTAL		
OPERATING TEMPERATURE	-40°F to +185°F (-40°C to +85°C)	
STORAGE TEMPERATURE	-40°F to +185°F (-40°C to +85°C)	
PROTECTION	IP67 complete controller, IP66 panel mount w/ gasket (minimum 14 ga metal plate)	
VIBRATION	Random, 7.86 Grms (5-2000Hz), 3 Axes	
SHOCK	±50G in 3 axes	
EMC/EMI	SAE J1113, ISO 13766, CE per 2014/30/EU	
CASE	Polycarbonate	
DIMENSIONS	Width: 8.2 in. (208.7 mm) Height: 7.5 in. (189.7 mm) Depth: 2.3 in. (57.5 mm)	

ML2000 SPECIFICATIONS

HARDWARE		
CONTROL MODULE	Murphy PowerCore® MPC-20	
MATING CONNECTORS	21 position, Deutsch HDP26-24-21SE 31 position, Deutsch HDP26-24-31SSE	
ENVIRONMENTAL		
ENCLOSURE	Powder-coated cold rolled steel or polycarbonate	

FOR MANUALS, SUPPORT DOCUMENTS, AND WIRING DIAGRAMS PLEASE VISIT:

www.macquarrie.com.au/collections/auto-start-stop-controllers

