

MC3000 FAULT MESSAGES

FAULT	DESCRIPTION
OUTPUT	Output Transistor fault; Output current exceeded 200%. May be ground fault or short circuit.
LO VOLTS	Low DC Bus Voltage fault: DC bus voltage dropped below 60%. May be low line voltage
HI VOLTS	High DC Bus Voltage fault: DC bus voltage exceeded 120%. May be overhauling load.
HI TEMP	High Temperature fault: Heatsink or ambient temperature too high.
OVERLOAD	Current Overload fault: Output current exceeded 100% for too long. VFD may be undersized.
PWR TRAN	Power Transient fault.
PWR SAG	Power Sag fault: New control board installed. Perform factory reset using Parameter 65.
LANGUAGE	Language EEPROM fault.
EXTERNAL	External fault: TB-13D activated (Parameter 50).
DB ERROR	Dynamic Brake fault: DB Resistors overloaded.
CONTROL	Control Board fault: New software installed. Perform factory reset using Parameter 65.
INTERNAL	Internal fault.
INTERN (#)	Internal fault.
FOLLOWER	Loss of Follower fault: 4-20 mA signal at TB-5B dropped below 2 mA (Parameter 55).

MC3000 FAULT HISTORY

Parameter 99 - FAULT HISTORY stores the last eight faults that tripped the drive. The FAULT HISTORY indicates the number of the fault (number 1 is the most recent fault), the fault message, and the status of the drive at the time of the fault. An example is shown below:

FAULT NUMBER	FAULT MESSAGE	DRIVE STATUS
2	OUTPUT	ACCEL

In the example above, the second fault is being viewed, which is an OUTPUT fault that occurred while the drive was accelerating.

MC3000 PARAMETERS

NO.	PARAMETER NAME	FACTORY DEFAULT	NO.	PARAMETER NAME	FACTORY DEFAULT
0	LINE VOLTS	AUTO	41	AIN FLTR	0.02 SEC
1	SPEED #1	20.00 HZ	42	TB10A OUT	NONE
2	SPEED #2	20.00 HZ	43	@TB10A	60.00 HZ
3	SPEED #3	20.00 HZ	44	TB10B OUT	NONE
4	SPEED #4	20.00 HZ	45	@TB10B	125 %
5	SKIP #1	.00 HZ	47	TB13A	NONE
6	SKIP #2	.00 HZ	48	TB13B	NONE
7	BAND WID	1.00 HZ	49	TB13C	NONE
8	ACCEL	30.0 SEC	50	TB13D	EXT FAULT
9	DECEL	30.0 SEC	52	TB14 OUT	NONE
10	MIN FRQ	.50 HZ	53	TB15 OUT	NONE
11	MAX FRQ	60.00 HZ	54	RELAY	NONE
12	DC BRAKE	.0 VDC	55	TB5B LOSS	FAULT
13	DC TIME	.0 SEC	57	SERIAL	DISABLE
14	DYN BRAKE	OFF	58	ADDRESS	30
16	CURRENT	180 %	61	PASSWORD	0019
17	MOTOR OL	100 %	63	SOFTWARE	(NOTE 2)
18	BASE	60.00 HZ	64	MONITOR	ON
19	FX BOOST	(NOTE 1)	65	PROGRAM	RESET 60
22	TORQUE	CONSTANT	66	HISTORY	MAINTAIN
23	CARRIER	2.5 KHZ	70	PID MODE	OFF
25	START	NORMAL	74	PID FB	TB-5B
26	STOP	COAST	75	FB @ MIN	0.00 %
28	AUTO / MAN	BOTH	76	FB @ MAX	100.0 %
30	CONTROL	LOCAL	77	P GAIN	5.00 %
31	UNITS	HERTZ	78	I GAIN	0.0 SEC
32	HZ MULT	1.00	79	D GAIN	0.0 SEC
33	UNITS DP	XXXXX	80	PID ACC	30.0 SEC
34	LOAD MLT	100 %	81	MIN ALRM	0.00 %
35	CONTRAST	MED	82	MAX ALRM	0.00 %
36	SLEEP TH	.00 HZ	98	LANGUAGE	ENGLISH
37	SLEEP DL	30.0 SEC	99	FAULT HISTORY	(NOTE 2)
39	TB5 MIN	.00 HZ			
40	TB5 MAX	60.00 HZ			

NOTE 1: REFER TO THE MC3000 MANUAL.

NOTE 2: THESE PARAMETERS ARE VIEW-ONLY.

QRM3-OEOD

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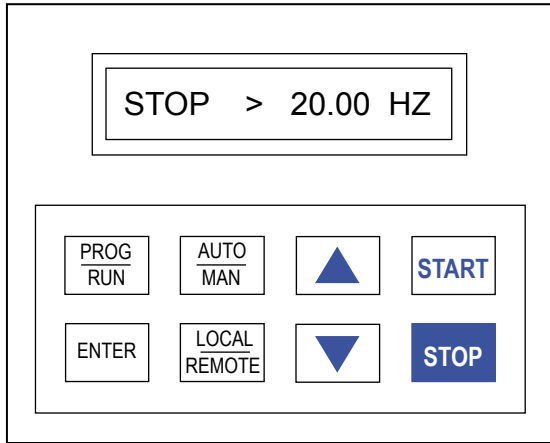
Drive for Global Excellence



MC3000 Series Quick Reference Guide

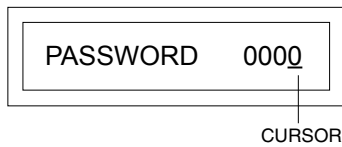
NOTE: Before installing and operating the MC3000 drive, please read and become familiar with the MC3000 Series Installation and Operation Manual.

THE MC3000 KEYPAD

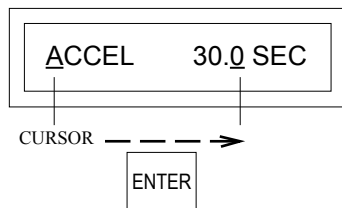


PROGRAMMING THE MC3000 DRIVE

1. Press the PROG/RUN key. This will cause the PASSWORD prompt to appear (unless the password protection has been disabled), as shown below:



2. Use the ▲ and ▼ keys to scroll to the correct password value (the factory default password is 0019) and press ENTER. The PROGRAM mode will be entered at the start of the parameter menu. A cursor will highlight the parameter name.
3. Use the ▲ and ▼ keys to scroll to the desired parameter and press ENTER. The cursor will shift from the parameter name to the parameter value, as the example below illustrates:



4. Use the ▲ and ▼ keys to scroll to the desired parameter value, and press ENTER to store the new value.
5. Press PROG/RUN to exit the PROGRAM mode.

MC3000 KEYPAD FUNCTIONS

START
Press the START key to start the drive. The START key is only active in LOCAL mode.

STOP
Press the STOP key to stop the drive.
NOTE: The STOP key is active in both LOCAL and REMOTE mode.

The STOP key is also used to reset faults. If the fault condition has passed, pressing the STOP key will clear the fault and return the drive to a STOP condition.

▲
▼
UP and DOWN ARROWS - Used to change the speed setpoint in MANUAL mode, scroll through the parameter menu, and change parameter values.

LOCAL
REMOTE
Toggles between LOCAL (keypad) and REMOTE (terminal strip) start/stop control.
NOTE: Parameter 30 - CONTROL must be set to KEYPAD or KEYPAD 2 for this key to be active.

AUTO
MAN
Toggles between AUTOMATIC (terminal strip) and MANUAL (keypad) speed control.
NOTE: Parameter 28 - AUTO/MAN must be set to A/M LOC or A/M SPD for this key to be active.

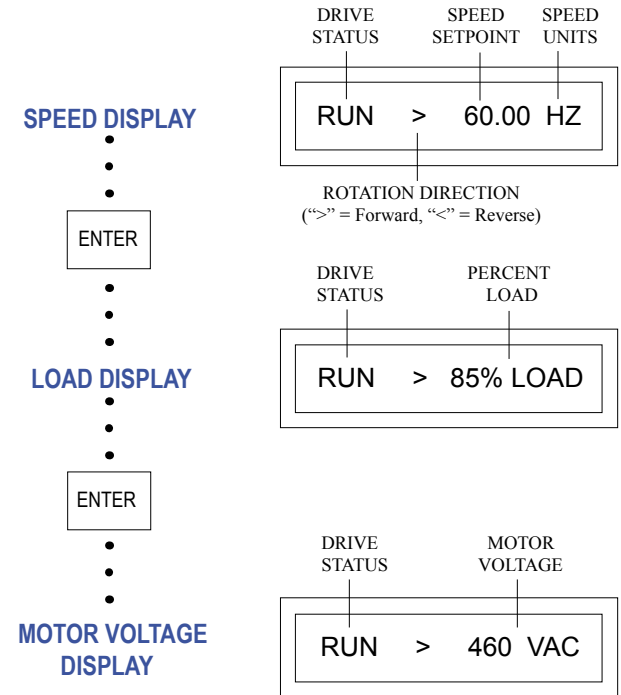
PROG
RUN
Used to enter and exit the PROGRAM mode to set the parameters.

ENTER
Used for: toggling the display between SPEED, LOAD, and MOTOR VOLTAGE; confirming new parameter values; confirming AUTO and MANUAL speed control selections; confirming LOCAL and REMOTE start/stop mode selections.

Press and hold the ENTER key to activate the AUXILIARY MODE, which consists of two displays that cycle in one second intervals. One indicates LOCAL/REMOTE mode, AUTO/MANUAL mode, and the speed reference source, and the other is an elapsed time meter that indicates total run time.

MC3000 DISPLAYS

Shown below are examples of MC3000 displays. To scroll through the SPEED, LOAD, and MOTOR VOLTAGE displays, press and release the ENTER key.



Press and hold the ENTER key to activate the AUXILIARY MODE, which will cycle in one second intervals between a CONTROL display and a TIME display. An example is shown below:

