MC1000 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.

MC1000 FAULT HISTORY

Parameter 70 - 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      FAULT      DRIVE
NUMBER    MESSAGE    STATUS

  2  OUTPUT    ACCEL
```

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

MC1000 PARAMETERS

NO.	PARAMETER NAME	FACTORY DEFAULT	NO.	PARAMETER NAME	FACTORY DEFAULT
0	LINE VOLTS	AUTO	32	HZ MULT	1.00
1	SPEED #1	20.00 HZ	33	SPEED DP	XXXXX
2	SPEED #2	20.00 HZ	34	LOAD MLT	100 %
3	SPEED #3	20.00 HZ	35	CONTRAST	MED
4	SPEED #4	20.00 HZ	36	SLEEP TH	.00 HZ
5	SKIP #1	.00 HZ	37	SLEEP DL	30.0 SEC
6	SKIP #2	.00 HZ	39	TB5 MIN	.00 HZ
7	BAND WID	1.00 HZ	40	TB5 MAX	60.00 HZ
8	ACCEL	30.0 SEC	41	AIN FLTR	0.02 SEC
9	DECEL	30.0 SEC	42	TB10A OUT	NONE
10	MIN FRQ	.50 HZ	43	@TB10A	60.00 HZ
11	MAX FRQ	60.00 HZ	44	TB10B OUT	NONE
12	DC BRAKE	.0 VDC	45	@TB10B	125 %
13	DC TIME	.0 SEC	47	TB13A	NONE
14	DYN BRAKE	OFF	48	TB13B	NONE
16	CURRENT	180 %	49	TB13C	NONE
17	MOTOR OL	100 %	50	TB13D	EXT FAULT
18	BASE	60.00 HZ	52	TB14 OUT	NONE
19	FX BOOST	(NOTE 1)	53	TB15 OUT	NONE
20	AC BOOST	.0 %	54	RELAY	NONE
21	SLIP CMP	.0 %	57	SERIAL	DISABLE
22	TORQUE	CONSTANT	58	ADDRESS	30
23	CARRIER	2.5 KHZ	61	PASSWORD	0019
25	START	NORMAL	63	SOFTWARE	(NOTE 2)
26	STOP	COAST	64	MONITOR	ON
27	ROTATION	FORWARD	65	PROGRAM	RESET 60
28	AUTO / MAN	BOTH	66	HISTORY	MAINTAIN
29	MANUAL	KEYPAD	69	LANGUAGE	ENGLISH
30	CONTROL	LOCAL	70	FAULT HISTORY	(NOTE 2)
31	UNITS	HERTZ			

NOTE 1: REFER TO THE MC1000 MANUAL.

NOTE 2: THESE PARAMETERS ARE VIEW-ONLY.

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Drive for Global Excellence

mc series

```
RUN   >   60.00  HZ
```
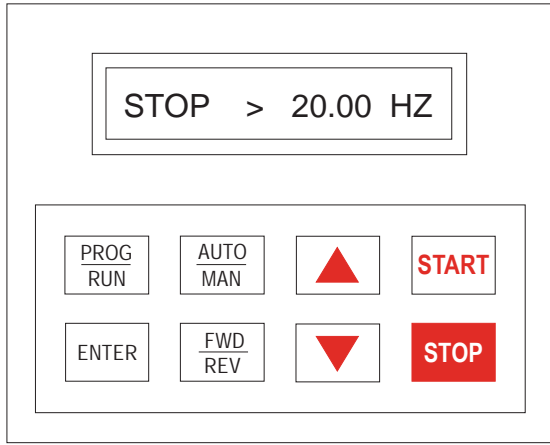
Intelligent Drive

| PROG RUN | AUTO MAN | ▲ | START |
| ENTER | FWD REV | ▼ | STOP |

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# MC1000 Series
Quick Reference Guide

NOTE: Before installing and operating the MC1000 drive, please read and become familiar with the MC1000 Series Installation and Operation Manual.

THE MC1000 KEYPAD

```
┌─────────────────────────────────┐
│  ┌───────────────────────────┐  │
│  │  STOP   >  20.00  HZ      │  │
│  └───────────────────────────┘  │
│  ┌───────────────────────────┐  │
│  │ ┌──────┐ ┌──────┐ ┌──┐ ┌──────┐ │
│  │ │ PROG │ │ AUTO │ │▲ │ │START │ │
│  │ │ RUN  │ │ MAN  │ └──┘ └──────┘ │
│  │ └──────┘ └──────┘           │  │
│  │ ┌──────┐ ┌──────┐ ┌──┐ ┌──────┐ │
│  │ │ENTER │ │ FWD  │ │▼ │ │ STOP │ │
│  │ │      │ │ REV  │ └──┘ └──────┘ │
│  │ └──────┘ └──────┘           │  │
│  └───────────────────────────┘  │
└─────────────────────────────────┘
```
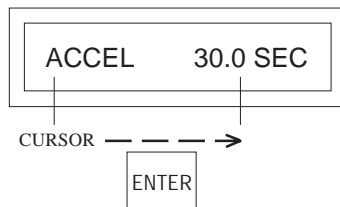
PROGRAMMING THE MC1000 DRIVE

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

```
┌───────────────────────────┐
│  PASSWORD      0000       │
└───────────────────────────┘
                      │
                   CURSOR
```
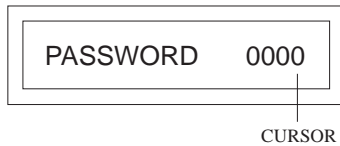
2. Use the ▲ and ▼ keys to scroll to the correct password value (the factory default password is 0019) and press ENTER. The PROGRAM mode will be entered at the start of the parameter menu. A cursor will highlight the parameter name.

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:

```
┌───────────────────────────┐
│  ACCEL      30.0 SEC      │
└───────────────────────────┘
     CURSOR ─ ─ ─ ─ ─→
              ┌───────┐
              │ ENTER │
              └───────┘
```

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.

MC1000 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.

FWD REV — Toggles between FORWARD and REVERSE rotation.
NOTE: Parameter 27 - ROTATION must be set to FWD & REV, and the drive must be in LOCAL mode 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 BOTH for this key to be active.

PROG RUN — Used to enter and exit the PROGRAM mode to set the parameters.
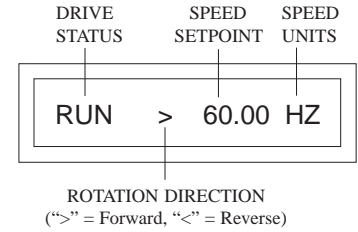
ENTER — Used for: toggling the display between SPEED, LOAD, and MOTOR VOLTAGE; confirming new parameter values; confirming AUTO and MANUAL speed control selections; confirming LOCAL and REMOTE start/stop mode selections.

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.
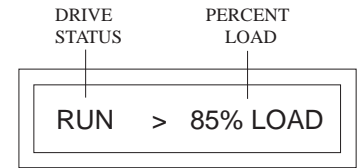
MC1000 DISPLAYS

Shown below are examples of MC1000 displays. To scroll through the SPEED, LOAD, and MOTOR VOLTAGE displays, press and release the ENTER key.
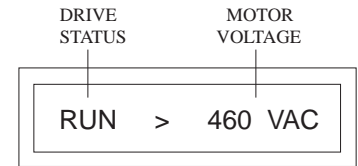
SPEED DISPLAY

```
            DRIVE      SPEED     SPEED
            STATUS     SETPOINT  UNITS
┌───────────────────────────┐
│  RUN    >   60.00  HZ     │
└───────────────────────────┘
            ROTATION DIRECTION
            (">" = Forward, "<" = Reverse)
```

ENTER

LOAD DISPLAY

```
            DRIVE          PERCENT
            STATUS         LOAD
┌───────────────────────────┐
│  RUN    >   85% LOAD      │
└───────────────────────────┘
```

ENTER

MOTOR VOLTAGE DISPLAY

```
            DRIVE          MOTOR
            STATUS         VOLTAGE
┌───────────────────────────┐
│  RUN    >   460  VAC      │
└───────────────────────────┘
```

Press and hold the ENTER key to activate the AUXILIARY MODE display, which indicates the control source (LOCAL, REMOTE, or SERIAL), AUTO or MANUAL mode, and the speed reference source. An example is shown below (IDC = 4-20 mA signal):

```
PRESS
& HOLD
┌───────┐
│ ENTER │
└───────┘
                                        SPEED
            CONTROL    AUTO/MAN    REFERENCE
            SOURCE     MODE        SOURCE
┌───────────────────────────┐
│  LOCAL -- AUTO -- IDC      │
└───────────────────────────┘
```

AUXILIARY MODE DISPLAY