



SPECIFICATIONS



"MX" MAGNETIC ACCELERATOR

Application

These solid state magnetic accelerators have been designed as speed input devices used with sold-state controls for electric vehicle traction motors. Applications include industrial fork lifts, utility vehicles, and airport ground support vehicles. They are suitable replacements for the GE "ACL" series accelerators, with corresponding wire harness configurations, as noted below.

Description

These accelerators are designed with a push pull linear input shaft, with a typical 0.1" displacement for start switch closure. The start switch function is performed by a power MOSFET, in lieu of a mechanical device. A hall effect sensor detects the input shaft displacement through the 0.75" shaft stroke, corresponding to an output voltage range of 3.5V to 0 V DC. Typical actuator force is 5 lbs, and should not exceed 7 lbs. The accelerator switch may be operated through a linkage mechanism or directly from the vehicle accelerator pedal. Customer connection is made by means of a metric M10x1.5 male thread.

The standard wire harness is 40" in length, including 4" of exposed color coded wire for accurate connections via Amp terminals. Five additional wire harness and plug alternatives are offered. A separate mounting base kit, GE part 328A1762G1, including mounting hardware, is available to provide greater flexibility in mounting. *Caution: These accelerators should not be located within 6" of contactors, solenoids or power cables.*

These accelerator switches do not require mechanical adjustment after installation, and include reverse battery protection and internal fusing for start switch over-current protection. Underwriter's Laboratory Type EE construction, O-ring cover seal, blind mounting holes, and insulated wire hole grommet all combine to eliminate the need for periodic cleaning. Note: This accelerator switch does not contain a 1A switch.

Specifications

- Approximate dimensions 97.8 mm wide x 187.4 mm long x 54.9 mm deep
- Input voltage 18 to 80 volts DC
- Input current 17 ma nominal
- Output voltage (maximum) 3.65 volts (nominal)
- Output voltage (minimum) 0.35 volts (nominal)
- Output current source 1 ma
- Output current sink 20 ma
- Start switch output voltage Equal to user battery input voltage
- Start switch output current 3 amps continuous, 5 amps intermittent (10 seconds)
- Operating temperature -40°C to +70°C
- Storage temperature -50°C to +120°C

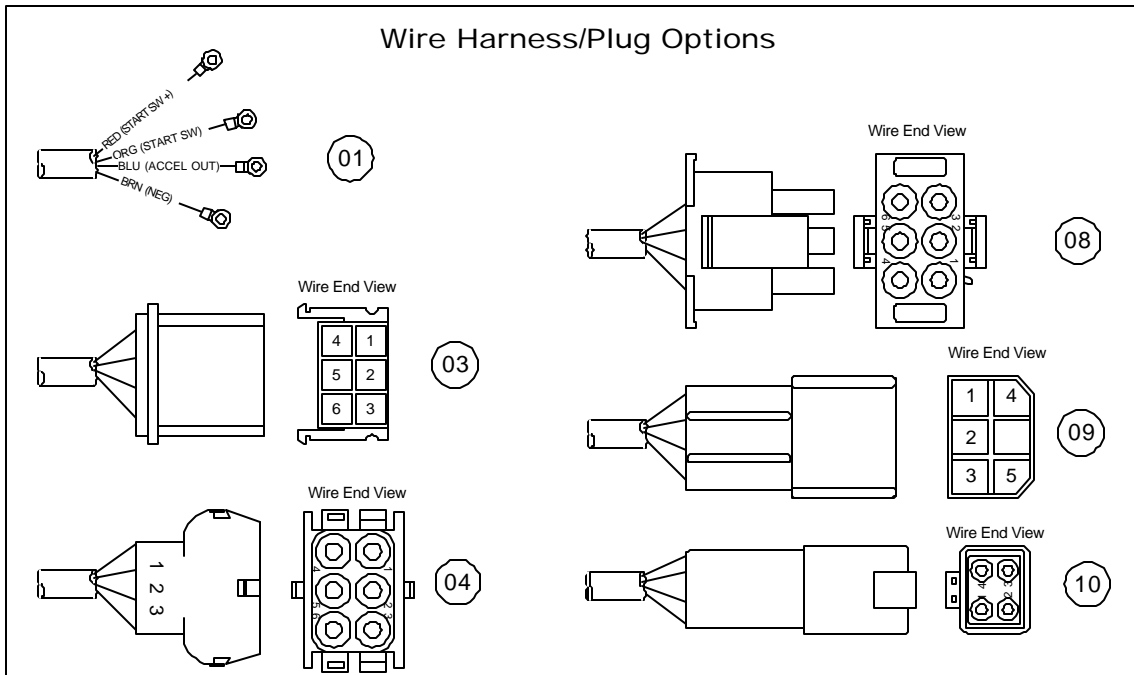
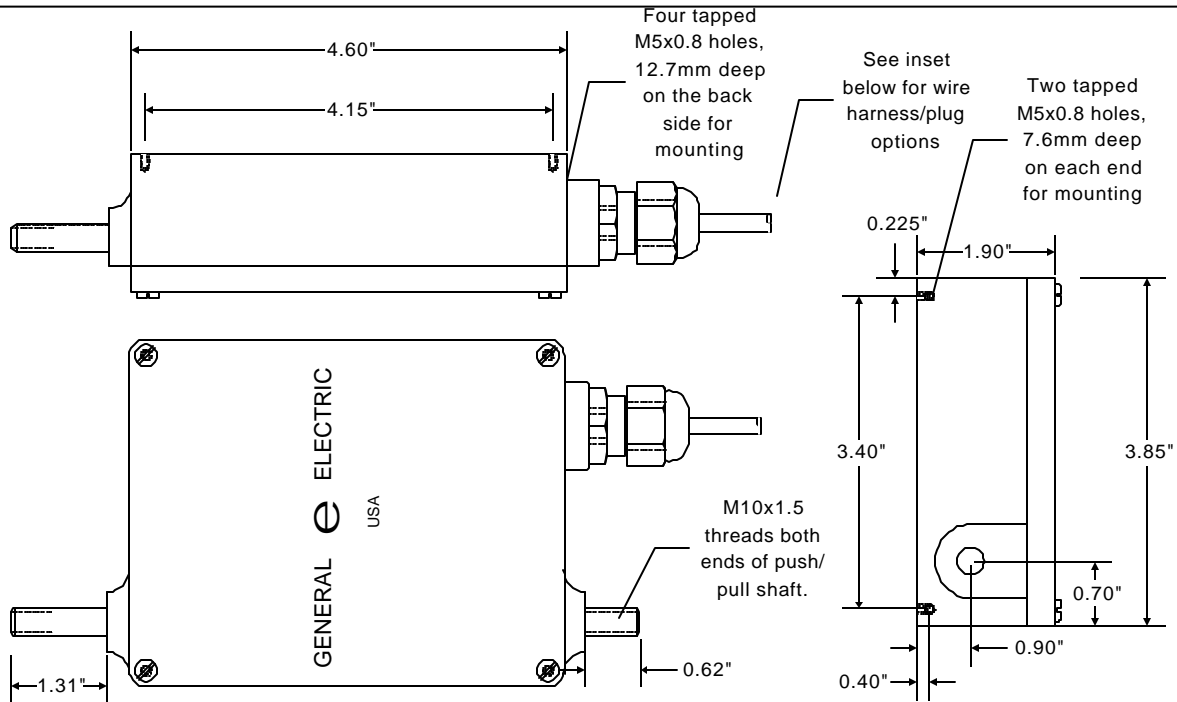
Ordering Information

GE Model Number	Description	"ACL" Wiring Option
IC4485ACH1BX01ACAC01	Standard 40" harness terminated with Amp #36151 terminals	01
IC4485ACH1BX01ACAC03	25.75" harness, terminated with Amp #180904-0 six position receptacle	03
IC4485ACH1BX01ACAC04	13" harness terminated with Amp #1-480705-0 receptacle	04
IC4485ACH1BX01ACAC08	22" harness terminated with Amp #350715-1 receptacle	08
IC4485ACH1BX01ACAC09	24" harness terminated with Amp #172044-1 five position receptacle	09
IC4485ACH1BX01ACAC10	12" harness terminated with Deutsch DT04-4P four position receptacle	10

Warranty and Service

This product is covered by a 12 month warranty, not to exceed 18 months from shipment, as described in GEP-973, "Conditions of Sale". Worldwide technical assistance and service are available from local GE representatives.

Outline (For Reference Only)



Wire Color	Connection	Plug Connections for Various Wire Harness Options					
		01	03	04	08	09	10
red wire	start switch positive	Terminal	Plug-3	Plug-3	Plug-1	Plug-5	Plug-4
orange wire	start switch negative	Terminal	Plug-2	Plug-1	Plug-2	Plug-1	Plug-3
blue wire	potentiometer	Terminal	Plug-5	Plug-5	Plug-3	Plug-2	Plug-1
brown wire	battery negative	Terminal	Plug-6	Plug-4	Plug-4	Plug-4	Plug-2