TP-D2 **High Speed Torsional Motor Operator**





14000 Rt. 993, Trafford, PA 15085 (724) 864-4177 FAX (724) 864-9040

Email: sales@cleavelandprice.com

Type TP-D2 Motor Operator

The Cleaveland/Price TP-D2 is a high speed torsional motor operating mechanism designed to operate any manufacturer's overhead distribution substation loadbreak switch. The TP-D2 design is similar to the Cleaveland/Price BT-D switch operator for line switch applications except it uses a power source from within the distribution substation rather than a self-contained battery. The operating speed of the TP-D2 is approximately 0.5 sec.

All internal components of the motor operator are accessible through the front door, eliminating the need for enclosure side panels. The motor control circuit, auxiliary switches, and heater are factory wired to terminal blocks located at the front of the operator enclosure. Terminal blocks for customer wiring are set at an angle for ultimate accessibility. Connecting wires are clearly marked for easy identification.

The TP-D2 utilizes an advanced design, state-of-theart control circuit. Mechanical relays are not used to interrupt motor current. Power interruption is by solid state components with a mechanical relay in series that provides the assurance of an open circuit. Heavy arcing on relay contacts is eliminated, even with DC current — a proven breakthrough for long-term performance.





TP-D2 Exterior Features

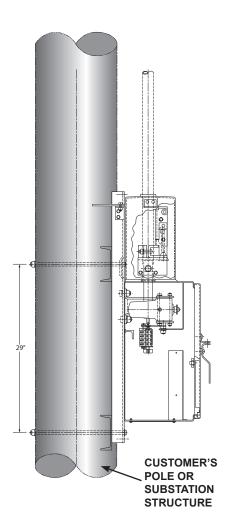
- Powder-coated marine grade aluminum enclosure with stainless steel hinge
- · Stainless steel padlockable handle
- Fully gasketed door with interior documentation pocket
- Ground clamp
- 4/0 ground braid
- Removable conduit plate
- · Safety guard

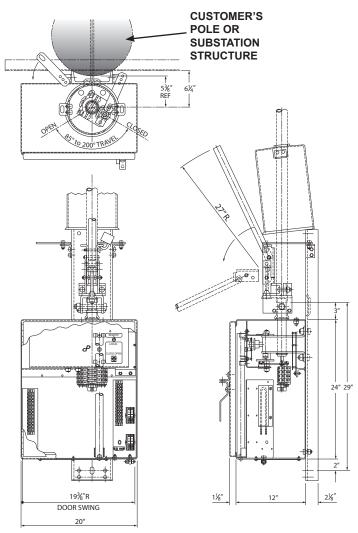
TP-D2 Operational Features

- Local/Remote switch
- Open/Close switch
- Fused and surge protected solid state control circuit
- Sealed-in and electrically interlocked directional relays
- Maintenance-free 3/4hp motor
- Dynamic braking
- Auxiliary switch contacts
- Electrically interlocked manual operating handle
- Torque-relief decoupler for 1½" IPS vertical operating pipe
- Thermostatically controlled 250 watt anti-condensation heater with safety touch guard



Dimensions





MOTOR OPERATOR WEIGHT = 120 LBS

Operating Specifications

	Catalog Number	Rated Voltage	Min. Operating Voltage	Max. Operating Voltage	Torque Rating In-Ibs.	Typical Running Current	Locked Rotor Current	Operating Time
DC	C11A003G08	48V.	36 V.	56 V.	7,000	20 A.	95 A.	0.4 sec
	C11A003G01	125 V.	90 V.	140 V.	7,000	6 A.	35 A.	0.4 sec
	C11A003G07	125 V.	90 V.	140 V.	11,000	6 A.	35 A.	0.45 sec
AC	C11A003G02	120 V.	90 V.	140 V.	7,000	6 A.	20 A.	0.4 sec
	C11A003G03	240 V.	180 V.	254 V.	7,000	3 A.	10 A.	0.4 sec

^{*} Note: Motor operators rated 7,000 in-lbs torque can be used to operate 15 kV and 23 kV switches. Motor operators rated 11,000 in-lbs torque should be used for switches rated 34.5 kV or 46 kV.

Standard Features

- Torque-relief decoupler
- Weatherproof, dustproof, and rustproof NEMA 3SX enclosure
- · Padlockable stainless steel enclosure handle
- Removable conduit entrance plate
- Swing handle for manual operation
- Local/remote control
- Dynamic braking for electrical stop
- · Fused control and motor circuit
- Thermostatically controlled 250 watt heater
- Two auxiliary switch contacts for customer use
- 4/0 ground strap

Ordering Information

Customer must specify:
Control voltage _____v. AC or DC
Heater voltage _____v.
Desired optional features

Optional Features

- · Additional auxiliary switch contacts
- Operations counter
- Switch position indicating lights
- Weatherproof external GFI
- Interior enclosure lamp
- Customer specified terminal blocks
- · Custom control circuit
- · Stainless steel enclosure
- NEMA 4X rated enclosure
- Circuit breaker instead of fuse for circuit protection
- True switch position indicating contacts
- · Internal grounding bus
- Operation time delay with delay in process indicator
- Humidistat
- Other optional features are available.
 Contact the factory for more information.