E50 Heavy-Duty Plug-In Switches



Contents

| Description | Page |
|------------------------------------|----------|
| E50 Heavy-Duty Plug-In Switches | |
| Product Selection | |
| Assembled Switches—Standard | V8-T2-55 |
| Assembled Switches—Special Purpose | V8-T2-58 |
| Operating Heads | V8-T2-59 |
| Switch Bodies | V8-T2-60 |
| Receptacles | V8-T2-61 |
| Compatible Connector Cables | V8-T2-62 |
| Accessories | V8-T2-62 |
| Technical Data and Specifications | V8-T2-64 |
| Circuit Diagrams | V8-T2-65 |
| Wiring Diagrams | V8-T2-65 |
| Dimensions | V8-T2-66 |
| Drowings | |

E50 Heavy-Duty Plug-In Switches

Product Description

E50 Modular Plug-In Limit Switch Components from Eaton's electrical sector are the industry standard with versatility of design and high reliability for low maintenance, installation and inventory costs. Standard Viton gaskets, seals and boots and a zinc die cast enclosure provide exceptional chemical resistance to the common coolants, cleansing agents, and hydraulic fluids found in machine tool, automotive, waste water treatment and other heavyduty industrial applications. Mounting dimensions accommodate both U.S. and DIN standards for easy retrofit installations. Super bright 24-120 Vac/dc LED indicating light versions simplify setup and troubleshooting operations.

Features

- Modular, plug-in components (head, body and receptacle) provide application flexibility, reduced inventory and less downtime
- · Manufactured to take the physical and environmental abuse (including cutting fluids and chemicals) of harsh industrial environments
- Chemical resistant Viton gaskets, seals and boots are standard, and so are captive, posi-drive screws
- The switches have terminal identification on the nameplate for a visual wiring checkout without guesswork. Heads and switch bodies can be replaced without rewiring

E50 devices can be ordered in separate components or as complete assembled switches

Online

- 600V rating, ridge-topped contacts and wiping action assure continuity even to logic level circuits
- Keyed, four direction head positioning
- Standard 5° pre-travel and 90° total travel
- 24-120 Vac/dc LED and 120 Vac neon indicating lights available
- · Rotary heads are field convertible CW, CCW, or both, without special tools
- Epoxy filled, pin connector or pigtail pin connector receptacles available

Standards and Certifications

- UL Listed
- **CSA Certified**
- IEC.947.5.1
- TUV-E9271605E02
- CE (where shown)









DANGER

THIS SENSOR IS NOT A **SAFETY DEVICE AND IS NOT** INTENDED TO BE USED AS A SAFETY DEVICE. This sensor is designed only to detect and read certain data in an electronic manner and perform no use apart from that, specifically no safetyrelated use. This sensor product does not include self-checking redundant circuitry, and the failure of this sensor product could cause either an energized or de-energized output condition, which could result in death, serious bodily injury, or property damage.

For the most current information on this product, visit our Web site: www.eaton.com

For Customer Service in the U.S. call 1-877-ETN CARE (386-2273), in Canada call 1-800-268-3578. For Application Assistance in the U.S. and Canada call 1-800-426-9184.

Assembled Switch

E50 Heavy-Duty Plug-In Switches, Assembled - Standard, continued





None

E50SA

E50RA

1NO-1NC

Catalog Number



LED (24–120 Vac/dc)

Assembled Switch (Head + Receptacle + Body)

E50SAL

E50RA

1NO-1NC



Two-Pole (9 Terminal Receptacle)

| None | LED (24–120 Vac/dc) | Neon (120 Vac) | LED (24–120 Vac/dc) | Neon (120 Vac) |
|------------|------------------------|-------------------|------------------------|-------------------|
| E50SB | E50SBL | E50SBN | E50SCL | |
| 2NO-2NC | 2NO-2NC | 2NO-2NC | 1NO-2NC | _ |
| E50RB | E50RB | E50RB | E50RB | E50RB |
| Assembled | Switch (Head + Red | ceptacle + Bod | (y) | |
| Catalon Nu | mher | • | - | |

Operating Head Type ②

Top Push Roller

Description



| Top | Push | Rol | ler |
|-----|------|-----|-----|
| | | | |

Indicating Light:

Switch Body:

Receptacle: ①

Spring return E50DT3 ³ E50AT3 E50ALT3 E50ANT3 (€

Neon

(120 Vac)

E50SAN

1NO-1NC

E50BT3 E50BLT3 E50BNT3

Wobble Head, Spring Return



| Wobble Head, Spring Return | |
|---|--|
| (requires a wobble operator, see Page V8-T2-80) | |

| (requires a wor | ble operator | , see rage vo-12 | 2-00) | | | | | |
|--|----------------------|------------------|---------|--------|---------|---------|----------|---------|
| Standard duty— E50DW1 | E50AW1 C € | E50ALW1 | E50ANW1 | E50BW1 | E50BLW1 | E50BNW1 | EB50BLW1 | _ |
| Heavy-duty high strength steel— E50DW2 | E50AW2 C € | E50ALW2 | E50ANW2 | E50BW2 | E50BLW2 | E50BNW2 | E50CLW2 | E50BNW2 |

Circuit Diagrams, see Page V8-T2-65.

① Connection options (add the code suffix from the table below to the end of the catalog number):

| Option | | Mating Cordset Catalog Number | Code Suffix |
|---|-------------------------------------|----------------------------------|-------------|
| Mini-connector ⁽⁴⁾ (with epoxy filled receptacle) | Single-pole (5-pin mini-connector) | CSMS5D5CY1602 | P5 ® |
| | Two-pole (9-pin mini-connector) | CSMS9D9CY1602 | P9 ® |
| Micro-connector ⁽⁴⁾ (with epoxy filled receptacle) | Single-pole (5-pin micro-connector) | CSDS5A5CY2202 | A5 ® |
| Cable connection (with epoxy filled receptacle) | 8 ft cable length | _ | S |
| | 12 ft cable length | _ | S12 |
| | 20 ft cable length | _ | S20 |
| Manifold mount (rear wiring entrance) | | _ | М |
| 20 mm Conduit Entrance | | _ | 20 |

- ② For operating head specifications, see Page V8-T2-59.
- 3 Roller can be converted in the field between horizontal and vertical.
- For a full selection of cable connectors, see Tab 10, section 10.1.
- ® Refer to Page V8-T2-65 for wiring diagrams.