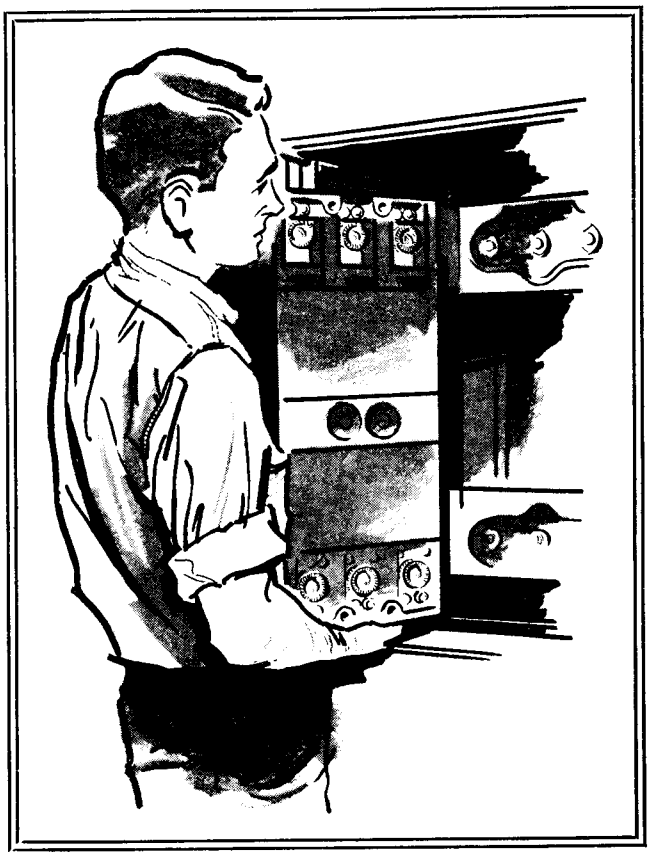
OPTIONAL ACCESSORIES

DESCRIPTION



A variety of optional accessories and design modifications are available to adapt I-T-E molded-case circuit breakers to special installation requirements. In some cases, the addition of accessories and modifications voids Underwriters' Laboratories, Inc. listing.

AUXILIARY SWITCH

For applications requiring remote "on" or "off" indication, or electrical interlocking, single-pole, double-throw, auxiliary switches are available in all two- and three-pole ET®, ET-H, ET-C and certain normal-duty (EQ®) circuit breakers. Each switch comprises an "A" (normally open when breaker is open) and a "B" (normally closed when breaker is open) contact, with a common connection. (See Section 2.6.5, Page 1.)

SHUNT TRIP

One or all critical circuit breakers may be tripped at the push of a button from a distant control point by use of a shunt trip device. This device operates through an auxiliary switch contact, so that when the breaker opens, current cannot be maintained on the shunt trip coil. The shunt trip is available in all three-pole ET, ET-H and ET-C breakers in coils rated 120, 240, 480 or 600 volts ac; 24, 48, 125 or 250 volts dc.

The shunt trip is also available in certain normal-duty (EQ) breakers in coils rated 120 or 240 volts ac (Additionally, coils rated 24, 48, 125 or 250 volts dc are available with the QJ breaker only.) (See Section 2.6.5, Page 1.)

OPTIONAL ACCESSORIES

DESCRIPTION

UNDERVOLTAGE TRIP

When voltage drops to a predetermined value (usually 30—60% of the nominal coil rating), the undervoltage trip device automatically opens the breaker. The operation is instantaneous, and the circuit breaker cannot be reclosed until the voltage returns to a level above the predetermined value which opened the breaker. The undervoltage trip, which is continuously energized, must be operating before the circuit breaker can be closed. It is available in all two- and three-pole ET®, ET-H and ET-C breakers in coils rated 120, 240, 480 or 600 volts ac; 24, 48, 125 or 250 volts dc. (See Section 2.6.5, Page 1.)

ALARM SWITCH

The alarm switch contact is closed when the circuit breaker is opened automatically by an overload, short circuit, shunt trip or undervoltage trip and provides immediate audio or visual indication of the unusual circuit condition. The alarm switch contact is open when the breaker is reset. An alarm switch is available in all two-and three-pole ET, ET-H and ET-C breakers. (See Section 2.6.5, Page 1.)

CENTER STUDS (Dual-Voltage Breakers)

For the protection of dual-voltage generators, center studs are available with most three-pole ET circuit breakers. These studs provide connections to allow the same trip unit to be used for protection at both voltages. At the higher voltage, the trip unit carries the full load current. At the lower voltage, half the current by-passes the trip unit through the center studs. (See Section 2.6.5, Page 1.)

CLEAR-SIGHT COVERS

For safety applications requiring visual inspection of circuit breaker main contacts, covers with transparent polycarbonate windows are available for most ET breakers. (See Section 2.6.5, Page 1.)

KIRK-KEY INTERLOCK

When two or more circuit breakers are located at some distance from each other and requirments permit only one of the breakers to be closed at a time, a Kirk-Key interlock is available for use with most ET breakers. This interlock normally operates in conjunction with the handle-operating mechanism of the circuit breaker enclosure, but, when the enclosure design permits, it can be adapted for direct operation on the circuit breaker handle. (See Section 2.7.5, Pages 1—2.)

MECHANICAL INTERLOCK

For applications requiring only one of a pair of circuit breakers to be closed at a time, a walking-beam mechanical interlock is available. This device, which can be furnished for most ET breakers, can be mounted in back of the breaker to interlock two horizontally-adjacent breakers. (See Section 2.6.5, Page 3.)

PLUG-IN MOUNTING ASSEMBLY

Mounting block assemblies with separable connectors for line and load end terminals can be furnished for use with most ET, ET-H and ET-C circuit breakers. A plug-in mounting assembly simplifies switchboard mounting of a breaker and permits removal of the breaker without disconnecting either bus or cable connections. (See Section 2.6.5, Page 4.)

AUTOMATIC-TRIP INTERLOCK

This device, which prevents the removal or replacement of a circuit breaker that is in the "on" position, is available in breakers equipped with plug-in (tulip) terminal connectors (see above). Withdrawal of the breaker will cause it to open (trip) before the drawout connectors can be separated, due to a spring-loaded interlocking mechanism incorporated into the breaker. (See Section 2.6.5, Page 4.)

REAR-CONNECTING STUDS

For switchboard mounting of breakers, front-removable, rear-connecting studs are available in various lengths to provide for either bus or cable connections. These studs can be furnished for all ET, ET-H and ET-C breakers except the HP, HR, CP&CR-frame breakers which are supplied with Connect-All mounting assemblies designed to provide for switchboard mounting without special studs. (See Section 2.6.5, Page 4.)

TELEMAND® REMOTE-CONTROL MOTOR OPERATOR

Remote electrical operation of ET, ET-H and ET-C circuit breakers in most frame sizes can be obtained with a Telemand Remote-Control Motor Operator. This unit is equipped with a two-directional motor which provides remote, high-speed operation of breakers in switchboards, control centers, automatic (emergency) power transfer arrangements, individual enclosures and other assembled equipment. (See Section 2.6.5, Page 5.)

HANDLE-OPERATING MECHANISM

Rotary or horizontal handle-operating mechanisms are available for QJ, ET, ET-H and ET-C frame breakers mounted in sheet-steel enclosures. (See Section 2.6.5, Page 6.)