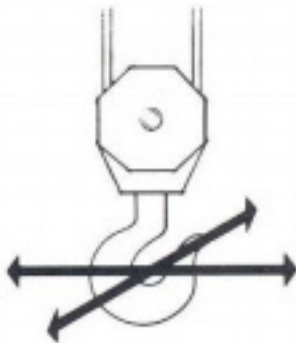


### TYPE 4020 REVERSING-PLUGGING CONTROL FOR BRIDGE OR TROLLEY SERVICE



Simple, easy-to-understand system has smooth, timed or frequency responsive acceleration and plugging control of wound rotor motor used for reversing drives on travel motions for all types of cranes. The motor is started with all the rotor resistance in the circuit. Contactors in the controller short out the external rotor resistance in timed or frequency responsive steps under control of a master switch to provide smooth and rapid acceleration.

During reversing, a frequency sensitive plugging relay prevents all of the secondary resistor contactors from closing until the motor is practically at rest. This keeps all of the external rotor resistance in the circuit during reversal to provide safe, controlled stopping.

Type 4020 reversing-plugging control panels are suitable for use with AC Wound Rotor Motors on crane bridge or trolley travel drives.

These panels can also be used on any reversing drive that is non-overhauling. Panels are arranged for use with separate AC or rectifier operated DC brakes.

Suitable for all NEMA and CMAA service classes.

Recommended for: NEMA service Class I, CMAA service Class A, B, C.

#### MATERIAL LIST FOR TYPE 4020 SINGLE MOTOR CONTROLLER WITHOUT PROTECTION

1	Three pole reversing contactor
2 or 3 or 4	Three pole accelerating contactors, including one for plugging
1	Frequency relay
1	Bulletin 5350 Static Timer

Contactors are NEMA rated solenoid (machine tool) type.

ELEMENTARY DIAGRAM FOR BRIDGE OR TROLLEY CONTROL

FOR TYPE 4020 CONTROLLER

