Picture shown may not reflect actual configuration

Molded Case and Insulated Case Circuit Breakers:

C27-C175 North America built packages (50/60Hz)

L-Frame
400A (UL)

P-Frame
800-1200A (UL)

R-Frame
1600-3000A (UL)

NS-Frame
1600-3200A (IEC)

NW-Frame
1200-5000A (UL), 1600-5000A (IEC)

Features

- Moisture and fungus protection
- Clear indication of breaker status
- Reinforced insulation
- Shunt trip
- Auxiliary contacts
- Load side extension bars
- Maintenance-free operation
- Exceptional characteristics under short-circuit conditions
- Adjustable trip settings

NS-Frame

- Federal Specification W-C-375B/GEN
- NEMA AB1
- UTE, VDE, BS, CEI, UNE

Conformity with International Standards

Circuit Breakers have been designed to comply with the international standard IEC 60947-2 as well as these other major standards:

L-Frame
UL 489
CSA 22.2 No 5
Federal Specification W-C-375B/GEN
NEMA AB1
NMX J-266
CCC
CE Marking

P-Frame & R-Frame
UL 489
IEC Standard 60947-2
CSA 22.2 No 5-02
Federal Specification W-C-375B/GEN
NEMA AB1
NMX J-266
UTE, VDE, BS, CEI, UNE

NW-Frame
UL 489
NEMA AB1
CSA 22.2 No. 5096
NMX J-266-ANCE
ANSI C37.13, C37.16, C37.17, C37.50
UL 1066 (cULus Listed)
NEMA SG3

Standard Features

Standards

- UL-CSA
  - L-Frame
  - P-Frame
  - R-Frame
  - NW-Frame
- IEC
  - NS-Frame

Shunt trip

- The shunt trip provides a means of tripping the circuit breaker electronically
- Shunt trip ratings
- Voltage: 24VDC
- Coil Burden (Holding/Inrush): 4.5/200 VA
- Power Consumption: 4.5 VA

Auxiliary contacts

The auxiliary contacts provide a means of remote circuit breaker position indication and consists of (1) Form C Contact (1 Normally open and 1 Normally closed contact) with the following current ratings:
6A @ 240-480 VAC, 50/60Hz

Trip units

All circuit breakers come equipped with True RMS Current Sensing.
The trip units for each of the circuit breaker ratings sample the current waveform to provide true RMS protection through the 15th harmonic. This true RMS sensing gives accurate values for the magnitude of a nonsinusoidal waveform. Therefore, the heating effects of harmonically distorted waveforms are accurately evaluated.
The trip system comes equipped with a set of current transformers (CT's) to sense current, a trip unit to evaluate the current, and a tripping solenoid to trip the circuit breaker.
Additionally, each trip unit comes equipped with Active Thermal Imaging which is active 20 minutes before and after tripping.

Customer cable connections

Connections include bus for installation flexibility.

Optional Features

Electrically-operated Circuit Breakers

Circuit breakers that are electrically-operated come with a two-step stored energy mechanism and come standard with a motor assembly. Motor assemblies provide on and off control from remote locations.
These assemblies contain a spring-charging motor, a shunt trip, and shunt close.
Motor Assembly Voltage Rating: 24-30VDC

Undervoltage trip

Undervoltage trip option trips the circuit breaker when the voltage drops to a value between 35% and 70% of the control voltage.
An attempt to close the circuit breaker when the UV is not energized produces no movement in the main contacts.
Closing is allowed when the supply voltage of the UV trip reaches 85% of the rated voltage.

- Voltage Rating: 24-30VAC/VDC
- Operating Threshold:
  - Opening: 0.35 to 0.7Vn
  - Closing: 0.85 Vn
- Power Consumption: 4.5VA
- Circuit Breaker Response Time at Vn: 50ms +/- 10

Circuit Breakers Table

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
4213235	400A L-Frame MCCB	UL	3P	MO	3.3S LSI	Table 10	1 Aux Contact, Shunt Trip	–
4213237	400A L-Frame MCCB	UL	3P	MO	6.3A LSIG	Table 10	1 Aux Contact, Shunt Trip	–
4213239	400A L-Frame MCCB	UL	4P	MO	6.3A LSIG	Table 11	1 Aux Contact, Shunt Trip	–
2449744	800A NS-Frame MCCB	IEC	4P	MO	5.0A LSI	Table 2	1 Aux Contact, Shunt Trip	–
2449794	800A P-Frame MCCB	UL	3P	EO	5.0A LSI	Table 1	1 Aux Contact, Shunt Trip	24
2449802	800A P-Frame MCCB	UL	3P	EO	6.0A LSIG	Table 1	1 Aux Contact, Shunt Trip	–
2449984	800A P-Frame MCCB	UL	3P	EO	5.0P LSI-P	Table 1	1 Aux Contact, Shunt Trip, Modbus	24
5858066	800A P-Frame MCCB	UL	3P	EO	5.0P LSI-P	Table 1	1 Aux Contact, Shunt Trip, Modbus	24
2449742	1200A P-Frame MCCB	UL	3P	EO	5.0A LSI	Table 1	1 Aux Contact, Shunt Trip	24
2449746	1200A P-Frame MCCB	UL	3P	EO	6.0A LSIG	Table 1	1 Aux Contact, Shunt Trip	24
2449766	1200A P-Frame MCCB	UL	3P	EO	6.0H LSIG-H	Table 1	1 Aux Contact, Shunt Trip, Modbus	24
2449770	1200A P-Frame MCCB	UL	3P	EO	6.0P LSIG-P	Table 1	1 Aux Contact, Shunt Trip, Modbus	24

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449988	1200A P-Frame MCCB	UL	3P	EO	5.0P LSI-P	Table 1	1 Aux Contact, Shunt Trip, Modbus	24
3834673	1200A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 7	4 Aux Contacts, Shunt Trip, UV	40
3834674	1200A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 7	4 Aux Contacts, Shunt Trip, UV	40
5858050	1200AP-FrameMCCB	UL	3P	EO	6.0P LSIG-P	Table 1	1 Aux Contact,Shunt Trip,Modbus	24
5858067	1200A P-Frame MCCB	UL	3P	EO	5.0P LSI-P	Table 1	1 Aux Contact, Shunt Trip, Modbus	24
2449764	1250A NS-Frame MCCB	IEC	4P	EO	5.0A LSI	Table 3	1 Aux Contact, Shunt Trip	–
2449765	1250A NS-Frame MCCB	IEC	4P	EO	6.0A LSIG	Table 3	1 Aux Contact, Shunt Trip	–
2449767	1250A NS-Frame MCCB	IEC	4P	EO	6.0P LSIG-P	Table 3	1 Aux Contact, Shunt Trip, Modbus	–
2449772	1600A NS1600 MCCB	IEC	3P	EO	5.0A LSI	Table 3	1 Aux Contact, Shunt Trip	–
2449773	1600A NS1600 MCCB	IEC	3P	EO	6.0A LSIG	Table 3	1 Aux Contact, Shunt Trip	–
2449775	1600A NS1600 MCCB	IEC	3P	EO	6.0P LSIG-P	Table 3	1 Aux Contact, Shunt Trip, Modbus	–
2449776	1600A NS1600 MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449777	1600A NS1600 MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
2449779	1600A NS1600 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449784	1600A NS1600 MCCB	IEC	4P	EO	5.0A LSI	Table 3	1 Aux Contact, Shunt Trip	–
2449785	1600A NS1600 MCCB	IEC	4P	EO	6.0A LSIG	Table 3	1 Aux Contact, Shunt Trip	–
2449787	1600A P-Frame MCCB	IEC	4P	EO	6.0P LSIG-P	Table 3	1 Aux Contact, Shunt Trip, Modbus	–
2449788	1600A NS1600 MCCB	IEC	4P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449789	1600A NS1600 MCCB	IEC	4P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
2449791	1600AP-Frame MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip	–
2449864	1600A R-Frame MCCB	UL	3P	MO	5.0A LSI	Table 6	1 Aux Contact, Shunt Trip	57
2449865	1600A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 6	1 Aux Contact, Shunt Trip	57
2449867	1600A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449870	1600A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 7	4 Aux Contact, Shunt Trip	40

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449871	1600A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 7	4 Aux Contact, Shunt Trip	40
2449872	1600A NW-Frame ICCB	UL	3P	EO	6.0H LSIG-H	Table 7	4 Aux Contact, Shunt Trip	40
2449873	1600A NW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 7	4 Aux Contact, Shunt Trip, Modbus	40
2449991	1600A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449996	1600A NW-Frame ICCB	UL	3P	EO	5.0P LSI-P	Table 7	4 Aux Contact, Shunt Trip, Modbus	40
3115765	1600A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 7	4 Aux Contacts, Shunt Trip, UV	40
3115766	1600A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 7	4 Aux Contacts, Shunt Trip, UV	40
3407174	1600A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 9	1 Aux Contact, Shunt Trip	48
3775313	1600A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 13	4 Aux Contacts, Shunt Trip, UV	40
3775314	1600A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 13	4 Aux Contacts, Shunt Trip, UV	40
3853411	1600A R-Frame MCCB	UL	3P	MO	5.0A LSI	Table 9	1 Aux Contact, Shunt Trip	48
3853414	1600AR-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	48

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
4448345	1600A NS-Frame MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
4448346	1600A NS-Frame MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
4448353	1600A NS-Frame MCCB	IEC	3P	EO	5.0A LSI	Table 4	2 Aux Contact, UV	–
4448354	1600A NS-Frame MCCB	IEC	3P	EO	6.0A LSIG	Table 4	2 Aux Contact, UV	–
4860754	1600A NS-Frame MCCB	IEC	3P	EO	5.0A LSI	Table 3	2 Aux Contact, Shunt Trip	–
4860755	1600A NS-Frame MCCB	IEC	3P	EO	6.0A LSIG	Table 3	2 Aux Contact, Shunt Trip	–
5805751	1600A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 9	2 Aux Contacts, Comms, Shunt Trip	–
5858063	1600A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
5858068	1600A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
5858071	1600A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	48
2449792	2000A NS2000 MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449793	2000A NS2000 MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
449795	2000A NS2000 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449800	2000A NS2000 MCCB	IEC	4P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449803	2000A NS2000 MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	24
2449868	2000AR-Frame MCCB	UL	3P	MO	5.0A LSI	Table 6	1 Aux Contact, Shunt Trip	57
2449869	2000A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 6	1 Aux Contact, Shunt Trip	57
2449874	2000A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	40
2449875	2000A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	40
2449876	2000A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	40
2449877	2000A NW-Frame ICCB	IEC	4P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
2449878	2000A NW-Frame ICCB	IEC	4P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–
2449879	2000A NW-Frame ICCB	IEC	4P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
2449880	2000A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 7	4 Aux Contact, Shunt Trip	40

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449881	2000A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 7	4 Aux Contact, Shunt Trip	40
2449882	2000A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 7	4 Aux Contact, Shunt Trip	40
2449883	2000A NW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 7	4 Aux Contact, Shunt Trip, Modbus	40
2449917	2000A R-Frame MCCB	UL	3P	MO	6.0H LSIG-H	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449918	2000A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449993	2000A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449997	2000A NW-Frame ICCB	UL	3P	EO	5.0P LSI-P	Table 7	4 Aux Contact, Shunt Trip	40
3115770	2000ANW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	40
3115771	2000A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	40
3115772	2000A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	40
3687990	2000A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 7	4 Aux Contact, Shunt Trip	40
3853415	2000A R-Frame MCCB	UL	3P	MO	5.0A LSI	Table 9	1 Aux Contact, Shunt Trip	48

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
3853416	2000A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 9	1 Aux Contact, Shunt Trip	48
3853417	2000A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	48
3946004	2000A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 7	4 Aux Contact, Shunt Trip	40
3946005	2000A NW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 7	4 Aux Contact, Shunt Trip, Modbus	40
4448347	2000A NS-Frame MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
4448348	2000A NS-Frame MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
4675944	2000A NW-Frame ICCB	UL	3P	EO	5.0P LSI-P	Table 7	4 Aux Contact, Shunt Trip, UV	40
5805746	2000A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 9	2 Aux Contacts, Comms, Shunt Trip	–
5858055	2000A NS2000 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
5858058	2000A NS2000 MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	24
5858064	2000A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
5858069	2000AR-FrameMCCB	UL	3P	MO	5.0P LSI-P	Table 6	1 Aux Contact,Shunt Trip,Modbus	57

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
5858072	2000A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	48
2449804	2500A NS2500 MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449805	2500A NS2500 MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
2449807	2500A NS2500 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449812	2500A NS2500 MCCB	IEC	4P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449813	2500A NS2500 MCCB	IEC	4P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
2449815	2500A NS2500 MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449884	2500A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	65
2449885	2500A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	65
2449886	2500A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	65
2449887	2500A NW-Frame ICCB	IEC	4P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
2449888	2500A NW-Frame ICCB	IEC	4P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449889	2500A NW-Frame ICCB	IEC	4P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
2449890	2500A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 8	4 Aux Contact, Shunt Trip	65
2449891	2500A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 8	4 Aux Contact, Shunt Trip	65
2449893	2500ANW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	65
2449919	2500A R-Frame MCCB	UL	3P	MO	5.0A LSI	Table 6	1 Aux Contact, Shunt Trip	57
2449920	2500A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 6	1 Aux Contact, Shunt Trip	57
2449921	2500A R-Frame MCCB	UL	3P	MO	6.0H LSIG-H	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449922	2500A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449995	2500A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
2449998	2500A NW-Frame ICCB	UL	3P	EO	5.0P LSI-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	65
3853418	2500A R-Frame MCCB	UL	3P	MO	5.0A LSI	Table 9	1 Aux Contact, Shunt Trip	48
3853425	2500A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 9	1 Aux Contact, Shunt Trip	48

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
3853427	2500A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	48
3946006	2500A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
3946007	2500A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–
3946008	2500A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
3946009	2500A NW-Frame ICCB	IEC	4P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
3946010	2500A NW-Frame ICCB	IEC	4P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–
3946011	2500A NW-Frame ICCB	IEC	4P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
3946012	2500ANW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 8	4 Aux Contact, Shunt Trip	65
3946013	2500A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 8	4 Aux Contact, Shunt Trip	65
3946014	2500A NW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	65
4448349	2500A NS-Frame MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
4448350	2500A NS-Frame MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
4675945	2500A NW-Frame ICCB	UL	3P	EO	5.0P LSI-P	Table 8	4 Aux Contacts, Shunt Trip, UV, Modbus	65
5858059	2500A NS2500 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
5858060	2500A NS2500 MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
5858065	2500A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
5858070	2500A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 6	1 Aux Contact, Shunt Trip, Modbus	57
5858073	2500A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	48
2449900	3000A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 8	4 Aux Contact, Shunt Trip	65
2449901	3000A NW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 8	4 Aux Contact, Shunt Trip	65
2449903	3000A NW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	65
2449999	3000A NW-Frame ICCB	UL	3P	EO	5.0P LSI-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	65
3946021	3000A NW-Frame ICCB	UL	3P	EO	5.0A LSI	Table 8	4 Aux Contacts, Shunt Trip, UV	65
3946022	3000ANW-Frame ICCB	UL	3P	EO	6.0A LSIG	Table 8	4 Aux Contacts, Shunt Trip, UV	65

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
3946023	3000A NW-Frame ICCB	UL	3P	EO	6.0P LSIG-P	Table 8	4 Aux Contacts, Shunt Trip, UV, Modbus	65
4543485	3000A R-Frame MCCB	UL	3P	MO	5.0A LSI	Table 9	1 Aux Contact, Shunt Trip	–
4543486	3000A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 9	1 Aux Contact, Shunt Trip	–
4543487	3000A R-Frame MCCB	UL	3P	MO	6.0A LSIG	Table 9	1 Aux Contact, Shunt Trip	–
4543488	3000A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	–
5858074	3000A R-Frame MCCB	UL	3P	MO	5.0P LSI-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	–
5858075	3000A R-Frame MCCB	UL	3P	MO	6.0P LSIG-P	Table 9	1 Aux Contact, Shunt Trip, Modbus	–
2449816	3200A NS3200 MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449817	3200A NS3200 MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
2449819	3200A NS3200 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449820	3200A NS3200 MCCB	IEC	4P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
2449821	3200A NS3200 MCCB	IEC	4P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449823	3200A NS3200 MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449894	3200A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
2449895	3200A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–
2449896	3200ANW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
2449897	3200A NW-Frame ICCB	IEC	4P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
2449898	3200A NW-Frame ICCB	IEC	4P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–
2449899	3200A NW-Frame ICCB	IEC	4P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
3946015	3200A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	–
3946016	3200A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	–
3946017	3200A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
3946018	3200A NW-Frame ICCB	IEC	4P	EO	5.0A LSI	Table 5	4 Aux Contacts, Shunt Trip, UV	–
3946019	3200A NW-Frame ICCB	IEC	4P	EO	6.0A LSIG	Table 5	4 Aux Contacts, Shunt Trip, UV	–

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
3946020	3200A NW-Frame ICCB	IEC	4P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	–
4448351	3200A NS-Frame MCCB	IEC	3P	MO	5.0A LSI	Table 4	1 Aux Contact, Shunt Trip	–
4448352	3200A NS-Frame MCCB	IEC	3P	MO	6.0A LSIG	Table 4	1 Aux Contact, Shunt Trip	–
5858061	3200A NS3200 MCCB	IEC	3P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
5858062	3200A NS3200 MCCB	IEC	4P	MO	6.0P LSIG-P	Table 4	1 Aux Contact, Shunt Trip, Modbus	–
2449904	4000A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	170
2449905	4000A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	170
2449906	4000ANW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	170
2449907	4000A NW-Frame ICCB	IEC	4P	EO	5.0A LSI	Table 5	4 Aux Contact, Shunt Trip	170
2449908	4000A NW-Frame ICCB	IEC	4P	EO	6.0A LSIG	Table 5	4 Aux Contact, Shunt Trip	170
2449909	4000A NW-Frame ICCB	IEC	4P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	170
2449910	4000A NW-Frame ICCB	UL	6P	EO	5.0A LSI	Table 8	4 Aux Contact, Shunt Trip	170

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
2449911	4000A NW-Frame ICCB	UL	6P	EO	6.0A LSIG	Table 8	4 Aux Contact, Shunt Trip	170
2449913	4000A NW-Frame ICCB	UL	6P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	170
2527378	4000A NW-Frame ICCB	UL	6P	EO	5.0P LSI-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	170
3946024	4000A NW-Frame ICCB	IEC	3P	EO	5.0A LSI	Table 5	4 Aux Contacts, Shunt Trip, UV	170
3946025	4000A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contacts, Shunt Trip, UV	170
3946026	4000A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contact, Shunt Trip, Modbus	170
3946027	4000A NW-Frame ICCB	UL	6P	EO	5.0A LSI	Table 8	4 Aux Contacts, Shunt Trip, UV	170
3946028	4000A NW-Frame ICCB	UL	6P	EO	6.0A LSIG	Table 8	4 Aux Contacts, Shunt Trip, UV	170
3946029	4000A NW-Frame ICCB	UL	6P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	170
4448355	4000A NW-Frame ICCB	IEC	3P	EO	5.0 LSI	Table 5	4 Aux Contacts, Shunt Trip, UV	170
4448356	4000A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contacts, Shunt Trip, UV	170
4448357	4000ANW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contacts, Shunt Trip, UV	170

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
4675947	4000A NW-Frame ICCB	UL	6P	EO	5.0P LSI-P	Table 8	4 Aux Contacts, Shunt Trip, UV, Modbus	170
4860756	4000A NW-Frame ICCB	IEC	3P	EO	5.0 LSI	Table 5	4 Aux Contacts, Shunt Trip	170
4860757	4000A NW-Frame ICCB	IEC	3P	EO	6.0A LSIG	Table 5	4 Aux Contacts, Shunt Trip	170
4860758	4000A NW-Frame ICCB	IEC	3P	EO	6.0P LSIG-P	Table 5	4 Aux Contacts, Shunt Trip	170
2449914	5000A NW-Frame ICCB	IEC	6P	EO	5.0A LSI	Table 12	4 Aux Contact, Shunt Trip	170
2449915	5000A NW-Frame ICCB	IEC	6P	EO	6.0A LSIG	Table 12	4 Aux Contact, Shunt Trip	170
2449916	5000A NW-Frame ICCB	IEC	6P	EO	6.0P LSIG-P	Table 12	4 Aux Contact, Shunt Trip, Modbus	170
2449974	5000A NW-Frame ICCB	UL	6P	EO	5.0A LSI	Table 8	4 Aux Contact, Shunt Trip	170
2449975	5000A NW-Frame ICCB	UL	6P	EO	6.0A LSIG	Table 8	4 Aux Contact, Shunt Trip	170
2449977	5000A NW-Frame ICCB	UL	6P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	170
2527379	5000A NW-Frame ICCB	UL	6P	EO	5.0P LSI-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	170
3946030	5000A NW-Frame ICCB	IEC	6P	EO	5.0A LSI	Table 12	4 Aux Contacts, Shunt Trip, UV	170

Circuit Breakers Table (Continued)

Cat® Part Number	Frame and Rating (Amps)	IEC/UL	No. Poles	Operation	Trip Unit	Circuit Breaker Characteristics	Options	Instantaneous Override (kA RMS) +/- 10%
3946031	5000A NW-Frame ICCB	IEC	6P	EO	6.0A LSIG	Table 12	4 Aux Contacts, Shunt Trip, UV	170
3946032	5000A NW-Frame ICCB	IEC	6P	EO	6.0P LSIG-P	Table 12	4 Aux Contact, Shunt Trip, Modbus	170
3946033	5000A NW-Frame ICCB	UL	6P	EO	5.0A LSI	Table 8	4 Aux Contacts, Shunt Trip, UV	170
3946034	5000ANW-Frame ICCB	UL	6P	EO	6.0A LSIG	Table 8	4 Aux Contacts, Shunt Trip, UV	170
3946035	5000A NW-Frame ICCB	UL	6P	EO	6.0P LSIG-P	Table 8	4 Aux Contact, Shunt Trip, Modbus	170
4675948	5000A NW-Frame ICCB	UL	6P	EO	5.0P LSI-P	Table 8	4 Aux Contacts, Shunt Trip, UV, Modbus	170

Circuit Breakers Characteristics

Model			P-Frame
Number of Poles			3
Rated Current (Amps)			800-2500A (UL)
Voltage Rating (VAC)			600UL/ 690 IEC
Interrupt Rating (UL/CSA) (60Hz) - kA RMS		240V	65
		480V	35
		600V	18
IEC 60947-2 Rating (50/60Hz) - kA RMS	Icu	240V	50
		380/415V	35
	Ics	240V	25
		380/415V	20

Table 1

Model			NS-Frame MO
Number of Poles			3 & 4
Rated Current (Amps)			630-800A (IEC)
Voltage Rating (VAC)			690 (IEC)
IEC 60947-2 Rating (50/60Hz) - kA RMS	Icu	240V	85
		380/415V	50
	Ics	240V	50
		380/415V	50

Table 2

Model			NS-Frame EO
Number of Poles			3 & 4
Rated Current (Amps)			1250-1600A (IEC)
Voltage Rating (VAC)			690 (IEC)
IEC 60947-2 Rating (50/60Hz) - kA RMS	Icu	240V	50
		380/415V	50
	Ics	240V	37
		380/415V	37

Table 3

Model			NS-Frame MO
Number of Poles			3 & 4
Rated Current (Amps)			1600-3200A (IEC)
Voltage Rating (VAC)			690 (IEC)
IEC 60947-2 Rating (50/60Hz) - kA RMS	Icu	240V	85
		380/415V	70
	Ics	240V	65
		380/415V	52

Table 4

Model		NW-Frame
Number of Poles		3 & 4
Rated Current (Amps)		2000A - 4000A (IEC)
Voltage Rating (VAC)		690 IEC
IEC 60947-2 Rating (50/60Hz) -kA RMS	240V	65
	440V	65
	690V	65

Table 5

Circuit Breakers Characteristics (Continued)

Model			R-Frame
Number of Poles			3
Rated Current (Amps)			1600-3000A (UL)
Voltage Rating (VAC)			600UL/ 690 IEC
Interrupt Rating (UL/CSA) (60Hz) - kA RMS		240V	65
		480V	35
		600V	18
IEC 60947-2 Rating (50/60Hz) - kA RMS	Icu	240V	50
		380/415V	35
	Ics	240V	25
		380/415V	20

Table 6

Model		NW-Frame
Number of Poles		3 & 4
Rated Current (Amps)		1200-2000A (UL)
Voltage Rating (VAC)		600UL
Interrupt Rating (UL/CSA) (60Hz) - kA RMS	240V	65
	480V	65
	600V	50

Table 7

Model		NW-Frame
Number of Poles		3 & 4
Rated Current (Amps)		2500-5000A (UL)
Voltage Rating (VAC)		600UL
Interrupt Rating (UL/CSA) (60Hz) - kA RMS	240V	100
	480V	100
	600V	85

Table 8

Model			R-Frame
Number of Poles			3
Rated Current (Amps)			1600-3000A (UL)
Voltage Rating (VAC)			600UL/ 690 IEC
Interrupt Rating (UL/CSA) (60Hz) - kA RMS		240V	100
		480V	65
		600V	25
IEC 647-2 Rating (50/60Hz) - kA RMS	Icu	240V	65
		380/415V	50
	Ics	240V	35
		380/415V	25

Table 9

Model			L-Frame
Number of Poles			3
Rated Current (Amps)			400A (UL)
Voltage Rating (VAC)			600UL/ 525 IEC
Interrupt Rating (UL/CSA) (60Hz) - kA RMS		240V	65
		480V	35
		600V	18
IEC 647-2 Rating (50/60Hz) - kA RMS	Icu	240V	65
		380/415V	35
	Ics	220V	65
		380/415V	35

Table 10

Circuit Breakers Characteristics (Continued)

Model		L-Frame
Number of Poles		3
Rated Current (Amps)		400A (UL)
Voltage Rating (VAC)		600UL/ 525 IEC
Interrupt Rating (UL/CSA) (60Hz) - kA RMS	**240V**	200
	480V	200
	600V	100
IEC 647-2 Rating kA RMS	**240V**	150
	480V	75
	690V	20

Table 11

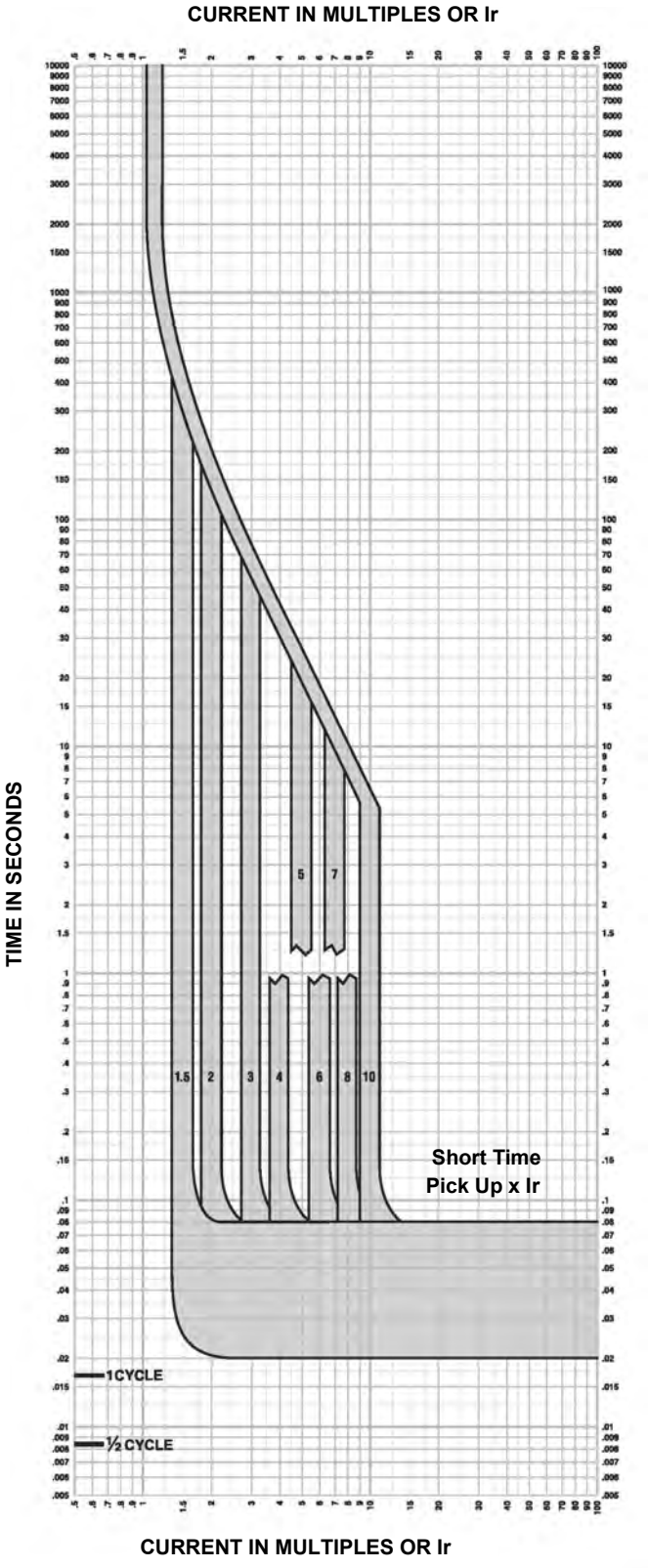
Model		NW-Frame
Number of Poles		3
Rated Current (Amps)		5000A (IEC)
Voltage Rating (VAC)		690 IEC
kAIC	**240V**	100
	440V	100
	690V	100

Table 12

Model		NW-Frame
Number of Poles		3
Rated Current (Amps)		1600A (IEC)
Voltage Rating (VAC)		690 IEC
kAIC	**240V**	42
	440V	42
	690V	42

Table 13

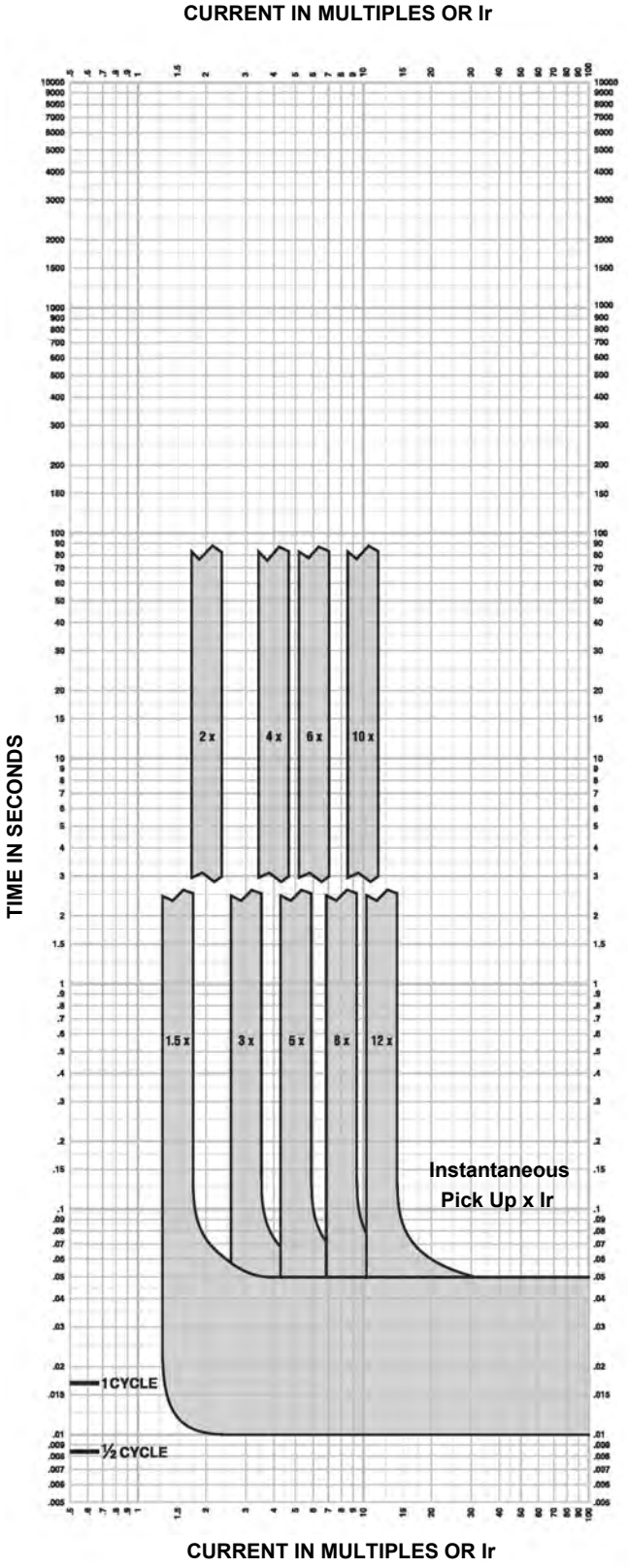
L-Frame Long-Short Trip Curve



3.3S Long Time/Short Time Trip Curve 250A, 400A L-Frame

The time-current curve information is to be used for application and coordination purposes only.
Notes:
1. There is a thermal-imaging effect that can act to shorten the long-time delay. The thermal imaging effect comes into play if a current above the long-time delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in a shorter time than normal. The amount of time delay reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately 20 minutes is required between overloads to completely reset thermal-imaging.
2. Total clearing times shown include the response times of the trip unit, the circuit breaker opening, and the extinction of the current.
Curves apply from -35ºC to +70ºC (-31ºF to +158ºF) ambient temperature.

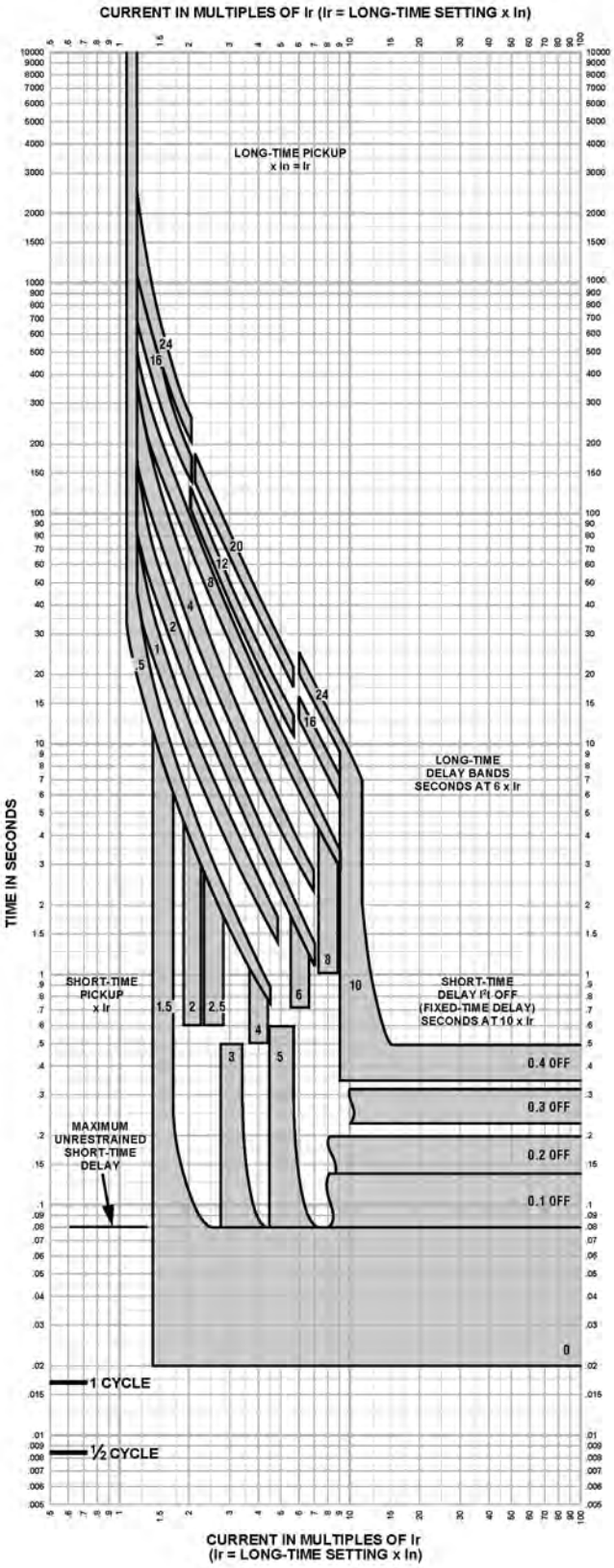
L-Frame Instant Trip Curve



3.3/3.3S Instantaneous Trip Curve 250A L-Frame

The time-current curve information is to be used for application and coordination purposes only.
Notes:
1. There is a thermal-imaging effect that can act to shorten the long-time delay. The thermal imaging effect comes into play if a current above the long-time delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in a shorter time than normal. The amount of time delay reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately 20 minutes is required between overloads to completely reset thermal-imaging.
2. Total clearing times shown include the response times of the trip unit, the circuit breaker opening, and the extinction of the current.
3. In = Maximum dial setting of Ir. 250A L-Frame: In = 250A = Max Ir setting Curves apply from -35ºC to +70ºC (-31ºF to +158ºF) ambient temperature.

P, R, NS-Frame Long-Short Trip Curve and NW-Frame Long-Short Trip Curve



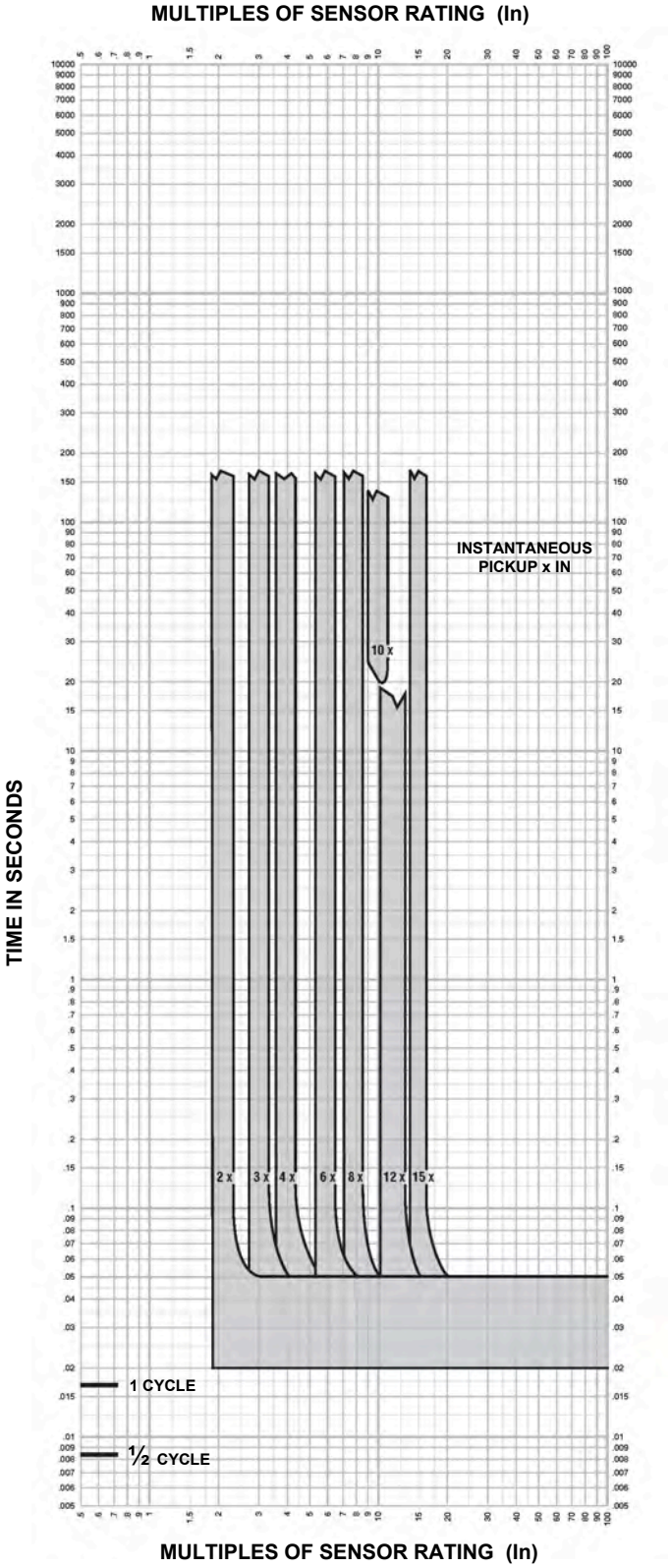
Long-time Pickup and Delay Short-time Pickup and I²t OFF Delay

The time-current curve information is to be used for application and coordination purposes only. Curves apply from -30°C to +60°C ambient temperature.

Notes:

1. There is a thermal-imaging effect that can act to shorten the long-time delay. The thermalimaging effect comes into play if a current above the long-time delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in a shorter time than normal. The amount of time delay reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately 20 minutes is required between overloads to completely reset thermal-imaging.
2. The end of the curve is determined by the interrupting rating of the circuit breaker.
3. With zone-selective interlocking on, short-time delay utilized and no restraining signal, the maximum unrestrained short-time delay time band applies regardless of the setting.
4. Total clearing times shown include the response times of the trip unit, the circuit breaker opening, and the extinction of the current.
5. For a withstand circuit breaker, instantaneous can be turned OFF. See Page 22 for instantaneous trip curve. See tables on pages 03-18 for instantaneous override values..
6. Overload indicator illuminates at 100%.

P, R, NS-Frame Instant Curve and NW-Frame Instant Trip Curve



Instantaneous Pickup 2x–15x and OFF

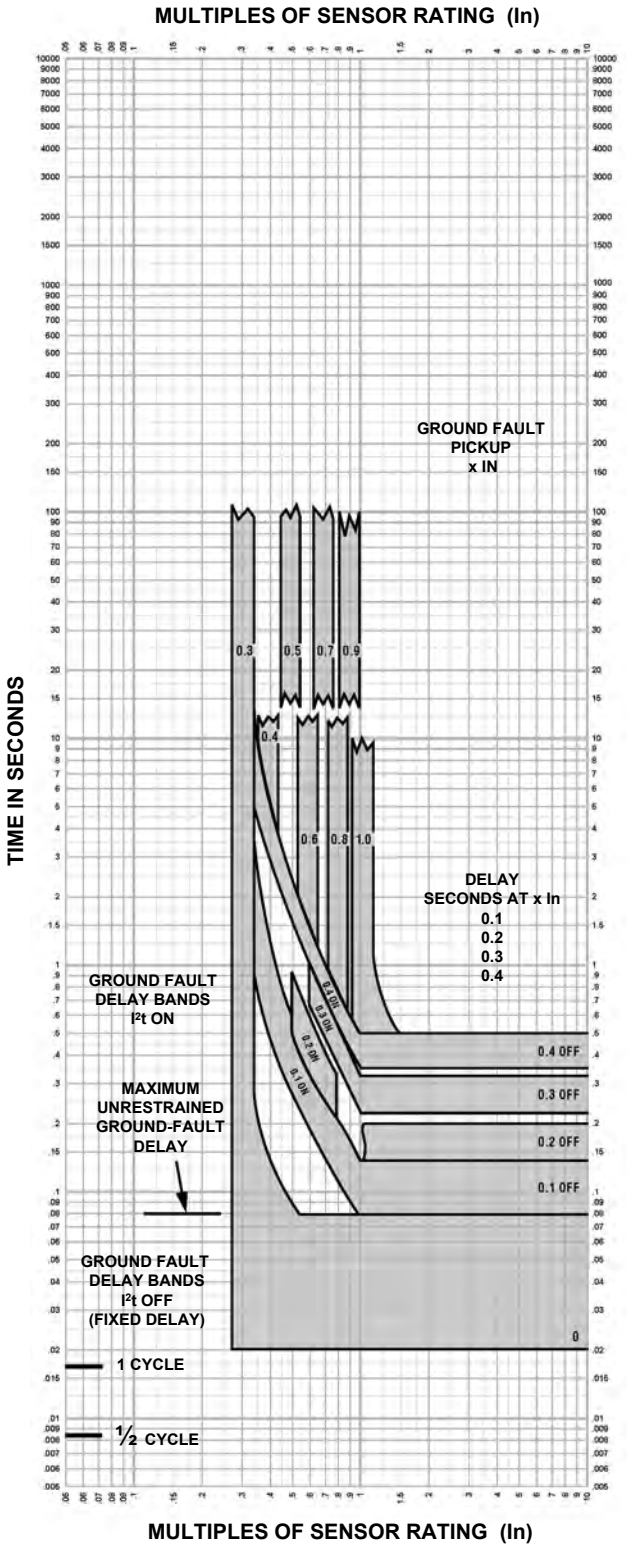
The time-current curve information is to be used for application and coordination purposes only.

Curves apply from -30° to +60°C ambient temperature.

Notes:

1. The end of the curve is determined by the interrupting rating of the circuit breaker.
2. Total clearing times shown include the response times of the trip unit, the circuit breaker opening, and the extinction of the current.
3. The instantaneous region of the trip curve shows maximum total clearing times. Actual clearing times in this region can vary depending on the circuit breaker mechanism design and other factors. The actual clearing time can be considerably faster than indicated. Contact your local Sales Office for additional information.
4. For a withstand circuit breaker, instantaneous can be turned OFF. See tables on pages 03-18 for instantaneous override values.
5. See page 22 for long-time pickup, long-time delay, short-time pickup, and short time delay trip curves.

P, R, NS-Frame Gound Curve and NW-Frame Ground Fault Trip Curve



Ground-fault I^2t OFF and ON In ≤ 400 A

The time-current curve information is to be used for application and coordination purposes only.

Curves apply from -30°C to +60°C ambient temperature.