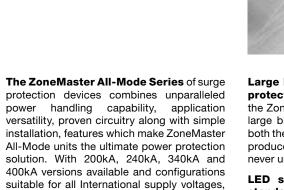


ZoneMaster All-Mode Series

Designed for all types of switchgear, distribution panels and branch panelboard applications.

- Enhanced redundancy plus thermal and short circuit fusing
- Low let-through performance with high current impulses
- 100k AIC short circuit current rating
- Replaceable bolt-in modules
- Large block MOV technology
- UL 1449 3rd Edition Listed
- 15 year product warranty



ZoneMaster All-Mode devices are modular in construction, individual modules are bolted to a large surge return plate to minimize transient impedance. These color coded, replaceable modules, with a UL 94-5V rated plastic casing are supplied mounted within a durable NEMA 4X (IP66) rated enclosure. ZoneMaster All-Mode units are easy to install via simple wall mounting.

ZoneMaster All-Mode is truly a versatile and

flexible protection range.



Large block Metal Oxide Varistor (MOV) protection technology is utilized within the ZoneMaster All-Mode range. Each of the large block MOVs are individually fused for both thermal and short circuit protection. This produces redundancy ensuring the facility is never unprotected.

LED status indication is supplied as standard, normally open/ normally closed contacts change state to indicate a fault. An optional remote monitoring unit is also available providing audio and visual indication of protector status, along with features such as a test switch for checking the monitoring circuitry and an audio alarm silence switch.

The optional power filter has a noise attenuation of 75dB at 100KHz-100MHz and will attenuate 6kV transients down to just 200V. This power filter is UL 1283 Listed and all ZoneMaster All-Mode devices are UL 1449 3rd Edition Listed.

901-146 Rev G 110511



All figures typical at 77°F (25°C) unless otherwise stated

Maximum continuous operating voltage

120V — 150Vac 277V — 320Vac

Lines protected

ZoneMaster All-Mode 200

L-N 100kA, L-G 100kA, L-L 200kA, N-G 200kA

ZoneMaster All-Mode 240

L-N 120kA, L-G 120kA, L-L 240kA, N-G 240kA

ZoneMaster All-Mode 340

L-N 170kA, L-G 170kA, L-L 340kA, N-G 170kA

ZoneMaster All-Mode 400

L-N 200kA, L-G 200kA, L-L 400kA, N-G 200kA

Duty cycle performance (8/20µs)

100,000A >4 impulses 10,000A >8,000 impulses

170A infinite Impulse current for class I (I_{imp})

ZoneMaster All-Mode 200 25kA (10/350µs)

ZoneMaster All-Mode 340 35kA (10/350µs)

ZoneMaster All-Mode 400 50kA (10/350µs)

Long duration current pulse (10/1,000µs) capability 3,600A (tested)

Ambient temperature limits

-40°F to +185°F (working)

-40°C to +85°C (working)

Humidity

95% RH (non-condensing)

Enclosure

NEMA 1, 2, 3, 3S, 4, 4X, 12 & 13 (IP66)

Terminals

2 AWG (32mm²)

Mounting

Surface mount by 0.31" (8mm) diameter holes

Indication

Continuous visual status monitoring

Green LED Lit = Full protection

Red LED Lit = Reduced (Standby) OR

No protection

Green LED out = No power to protector

Remote contacts

NO/NC

Weight

Zonemaster All-Mode 200 10.5 lbs (4.8Kg) Zonemaster All-Mode 240 10.5 lbs (4.8Kg) Zonemaster All-Mode 340 12.5 lbs (5.7Kg)

Zonemaster All-Mode 400 12.5 lbs (5.7Kg)

Dimensions

Enclosure — see figure 1

EMC compliance

BS EN 60950: 1992 BS EN 61000-6-2: 1999

OPTIONAL POWER FILTER

Limiting voltage

200V (@ 3kA 8/20µs)

Maximum attenuation (typical)

-75dB (100kHz to 100MHz)

OPTIONAL REMOTE MONITORING UNIT

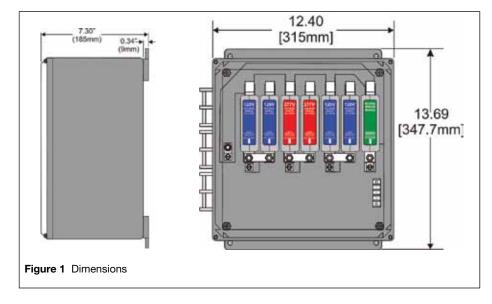
ZM11101 — Battery operated

TO ORDER SPECIFY -

Model number as per specification table Add suffix X for EMI/RFI filter

Model	Maximum	Working	UL	Limiting v	oltage	Phase types
	surge current Imax (kA)	voltage (V)	3rd Edition VPR (V)	@ 3kA* ((V)	@10kA (In) (V)	
ZM17200	200	120/240 split	700	416	528	Split phase 3-wire
ZM17201	200	120/208	700	416	528	Three phase 4-wire WYE
ZM17202	200	120/240	700/1200	416	528	Three phase 4-wire Delta
ZM17204	200	277/480	1200	776	904	Three phase 4-wire WYE
ZM17207	200	220/380	1200	776	904	Three phase 4-wire WYE
ZM17208	200	240/415	1200	776	904	Three phase 4-wire WYE
ZM17500	240	120/240 split	700	416	528	Split phase 3-wire
ZM17501	240	120/208	700	416	528	Three phase 4-wire WYE
ZM17502	240	120/240	700/1200	416	528	Three phase 4-wire Delta
ZM17504	240	277/480	1200	776	904	Three phase 4-wire WYE
ZM17507	240	220/380	1200	776	904	Three phase 4-wire WYE
ZM17508	240	240/415	1200	776	904	Three phase 4-wire WYE
ZM17300	340	120/240 split	600	416	528	Split phase 3-wire
ZM17301	340	120/208	600	416	528	Three phase 4-wire WYE
ZM17302	340	120/240	600/1200	416	528	Three phase 4-wire Delta
ZM17304	340	277/480	1200	776	904	Three phase 4-wire WYE
ZM17307	340	220/380	1200	776	904	Three phase 4-wire WYE
ZM17308	340	240/415	1200	776	904	Three phase 4-wire WYE
ZM17400	400	120/240 split	600	416	528	Split phase 3-wire
ZM17401	400	120/208	600	416	528	Three phase 4-wire WYE
ZM17402	400	120/240	600/1200	416	528	Three phase 4-wire Delta
ZM17404	400	277/480	1200	776	904	Three phase 4-wire WYE
ZM17407	400	220/380	1200	776	904	Three phase 4-wire WYE
ZM17408	400	240/415	1200	776	904	Three phase 4-wire WYE

^{*}Tested as per ANSI/IEEE C62.45; IEC 61643-1 $U_{OC} = 6kV$



APPROVALS

Country	Standard/Authority	Approved for	Product
United States Canada	UL 1449 3rd Edition Listed	AC power product	ZoneMaster All-Mode

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.







ZoneMaster Series

Ideally suited to protect small to medium service entrance panels from induced surges and transients

- Enhanced redundancy built into each module
- Easy to read status indication
- Thermal and short circuit fusing
- Low let-through performance with high current impulses
- 100k AIC short circuit current rating
- Replaceable bolt-in modules
- Large block MOV technology
- UL 1449 3rd Edition
- 15 year product warranty

The ZoneMaster Series of surge protection devices combines unparalleled power handling capability, application versatility, proven circuitry along with simple installation, features which make these units the ultimate mains power protection solution. With configurations suitable for all International supply voltages, ZoneMaster is truly a versatile and flexible protection range.

ZoneMaster devices are modular in construction. Individual modules are bolted to a large surge return plate to minimise transient impedance. These colour coded, replaceable modules, with a UL 94-5V rated plastic casing are supplied mounted within a durable IP66 rated enclosure. ZoneMaster units are easy to install via simple wall mounting, although flush mounting is also an option.

Large block, 3 terminal Metal Oxide Varistor (MOV) protection technology is utilised within the ZoneMaster range. The dual protection circuits of ZoneMaster 150 devices provide full redundancy ensuring the site is never unprotected. All ZoneMaster units also include thermal and short circuit fusing for additional safety.



Status indication is supplied as standard, normally open/ normally closed contacts change state to indicate a fault. An optional remote monitoring unit is also available providing audio and visual indication of protector status, along with features such as a test switch for checking the monitoring circuitry and an audio alarm silence switch.

The optional mains power filter has a noise attenuation of 75dB at 100KHz- 100MHz and will attenuate 6kV transients down to just 200V. This mains power filter is UL 1283 Listed and all ZoneMaster devices have UL 1449 Listing for added peace of mind.

901-133 Rev M 110511



All figures typical at 77°F (25°C) unless otherwise stated

Maximum continuous operating voltage

120V — 140Vac 240V — 280Vac

277V — 320Vac

Lines protected

ZoneMaster 170

L-N 170kA, L-L 170kA, N-G 170kA

ZoneMaster 200

L-N 200kA, L-L 200kA, N-G 200kA

Duty cycle performance (8/20µs)

100,000A >4 impulses 10,000A >8,000 impulses

170A infinite Impulse current for class I (I_{imp})

50kA (10/350µs)

Long duration current pulse (10/1,000µs) capability

3,600A (tested)

Ambient temperature limits

-40°F to +185°F (working)

-40°C to +85°C (working)

Humidity

95% RH (non-condensing)

Enclosure

NEMA 1, 2, 3, 3S, 4, 4X, 12 & 13 (IP66)

Terminals

2 AWG (32mm²)

Mounting

Surface mount by 0.31" (8mm)

diameter holes

Indication

Continuous visual status monitoring

Green LED Lit = Full protection

Red LED Lit = Reduced (Standby) OR

No protection

Green LED out = No power to protector

Remote contacts

NO/NC

Weight

Approx. 7 lbs (3.2 kg)

Dimensions

Enclosure — see figure 1

EMC compliance

BS EN 60950: 1992 BS EN 61000-6-2: 1999

OPTIONAL POWER FILTER

Limiting voltage 200V (@ 3kA 8/20µs) Maximum attenuation (typical) -75dB (100kHz to 100MHz)

TO ORDER SPECIFY -

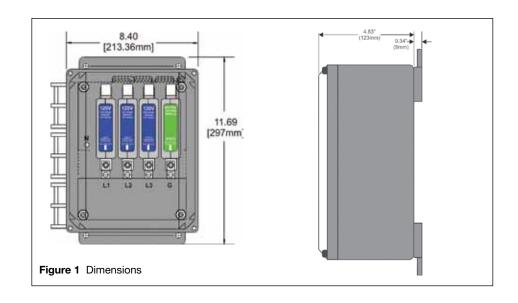
Model number as per specification table Add suffix X for EMI/RFI filter Add suffix F for flush mount options

OPTIONAL REMOTE MONITORING UNIT

ZM11101 - Battery operated

Model	Maximum surge	Working voltage	UL VPR	Limiting voltage		Phase types
	current Imax (kA)	(V)	3rd Edition*	@ 3kA (V)	@10kA (ln) (V)	
ZM11200	170	120/240 split	600	350	446	Split phase 3 wire
ZM11201	170	120/208	600	350	446	Three phase 4 wire WYE
ZM11202	170	120/240	600/1000	350	446	Three phase 4 wire Delta
ZM11203	170	240	1000	760	886	Three phase 3 wire Delta
ZM11204	170	277/480	1000	760	886	Three phase 4 wire WY
ZM11206	170	480	1800	1480	1680	Three phase 3 wire Delta
ZM11207	170	220/380	1000	760	886	Three phase 4 wire WYE
ZM11208	170	240/415	1000	760	886	Three phase 4 wire WYE
ZM11300	200	120/240 split	600	350	446	Split phase 3 wire
ZM11301	200	120/208	600	350	446	Three phase 4 wire WYE
ZM11302	200	120/240	600/1000	350	446	Three phase 4 wire Delta
ZM11303	200	240	1000	760	886	Three phase 3 wire Delta
ZM11304	200	277/480	1000	760	886	Three phase 4 wire WYE
ZM11306	200	480	1800	1480	1680	Three phase 3 wire Delta
ZM11307	200	220/380	1000	760	886	Three phase 4 wire WYE
ZM11308	200	240/415	1000	760	886	Three phase 4 wire WYE

^{*}Tested as per ANSI/IEEE C62.45; IEC 61643-1 U_{OC} = 6kV



APPROVALS

Country	Standard/Authority	Approved for	Product
United States Canada	UL 1449 Listed	AC power product	ZoneMaster

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

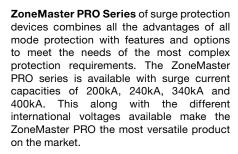


technical datasheet

ZoneMaster PRO Series

Designed for all types of switchgear, distribution & branch panels, plus available with numerous options for a broad range of applications.

- Enhanced redundancy built into each module
- Thermal and short circuit fusing
- Surge counter with fault monitor and audible alarm
- Low let-through performance with high current impulses
- 100k AIC short circuit rating
- Replaceable bolt-in modules
- UL 1449 3rd Edition Listed
- 15 year product warranty



ZoneMaster PRO Series features modular construction, individual modules are bolted to a large surge return plate to minimize transient impedance. These color coded replaceable modules with a UL94-5V rated plastic casing are supplied mounted within a durable metal enclosure. The ZoneMaster PRO units are easy to install via simple surface mounting or optional flush mounting.



Large block Metal Oxide Varistor (MOV) protection technology is utilized within all the ZoneMaster PRO range. Each of the large block MOVs are individually fused for both thermal and short circuit protection. This provides redundancy ensuring the facility is never unprotected.

Status indication is provided through a front panel display, audible, and NO/NC remote alarm contacts. Individual module status is provided by LED status indication on each module. An optional remote monitoring unit is also available providing audible and visual indication of protection status, along with features such as a test switch for checking the monitoring circuitry and an audio alarm silence switch.

The optional power filter has a noise attenuation of 75dB at 100kHz - 100MHz and will attenuate 6kV transients down to just 200 volts. This power filter is UL1283 Listed and all ZoneMaster PRO devices are UL1449 3rd Edition Listed.

-160 Rev E 110511



All figures typical at 77°F (25°C) unless otherwise stated

Maximum continuous operating voltage

120V — 140Vac 240V — 280Vac

277V — 320Vac

Lines protected

ZoneMaster PRO 200 L-N 100kA, L-G 100kA, L-L 200kA, N-G 200kA *Delta* — L-G 200kA, L-L 200kA

ZoneMaster PRO 240

L-N 120kA, L-G 120kA, L-L 240kA, N-G 240kA

Delta — L-G 240kA, L-L 240kA

ZoneMaster PRO 340

L-N 170kA, L-G 170kA, L-L 340kA, N-G 170kA

Delta — L-G 340kA, L-L 340kA

ZoneMaster PRO 400

L-N 200kA, L-G 200kA, L-L 400kA, N-G 200kA

Delta — L-G 400kA, L-L 400kA

Duty cycle performance (8/20µs)

100,000A >4 impulses 10,000A >8,000 impulses

200A infinite

Impulse current for class I (I_{imp})

50kA (10/350µs)

Long duration current pulse (10/1,000µs) capability

3,600A (tested)

Ambient temperature limits

-40°F to +185°F (working) -40°C to +85°C (working)

Humidity

95% RH (non-condensing)

Enclosure

NEMA 1 (standard)

Terminals

2 AWG (32mm²)

Mounting

Surface mount via 0.31" (8mm) diameter holes or optional flush mount available

Indication

Continuous visual status monitoring

Green LED Lit = Full protection
Red LED Lit = Reduced (Standby)

OR No protection

Remote contacts

NO/NC

Weight 25.4 lbs (11.2kg)

Dimensions

Enclosure - see figure 1

NEMA 4X: 507 x 508 x 255mm (approx.)

EMC compliance

BS EN 60950: 1992 BS EN 61000-6-2: 1999

OPTIONAL POWER FILTER

Limiting voltage

200V (@3kA 8.20µs)

Maximum attenuation (typical)

-75dB (100kHZ to 100MHz)

ORDERING INFORMATION

Model number as per specification table

Add suffix X for EMI/RFI filter

Add suffix F for flush mount options

Add suffix D for disconnect

Add suffix O for NEMA 4 enclosure

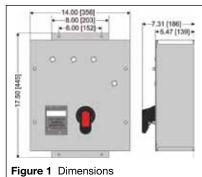
Add suffix S for NEMA 4X enclosure

Add suffix R for battery powered remote

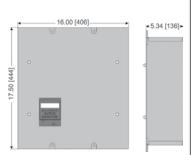
monitor unit

Model	Maximum surge current Imax (kA)	Working voltage (V)	UL 3rd Edition VPR (V)		g voltage @10kA (In) (V)	Phase types
ZM15100	200	120/240 split	700	416	528	Split phase 3 wire
ZM15101	200	120/208	700	416	528	Three phase 4 wire WYE
ZM15102	200	120/240	700/1200	416	528	Three phase 4 wire Delta
ZM15103	200	240	1200	832	1056	Three phase 3 wire Delta
ZM15104	200	277/480	1200	776	904	Three phase 4 wire WYE
ZM15106	200	480	2000	1552	1800	Three phase 3 wire Delta
ZM15107	200	220/380	1200	776	904	Three phase 4 wire WYE
ZM15108	200	240/415	1200	776	904	Three phase 4 wire WYE
ZM15000	240	120/240 split	700	416	528	Split phase 3 wire
ZM15001	240	120/208	700	416	528	Three phase 4 wire WYE
ZM15002	240	120/240	700/1200	416	528	Three phase 4 wire Delta
ZM15003	240	240	1200	832	1056	Three phase 3 wire Delta
ZM15004	240	277/480	1200	776	904	Three phase 4 wire WYE
ZM15006	240	480	2000	1552	1800	Three phase 3 wire Delta
ZM15007	240	220/380	1200	776	904	Three phase 4 wire WYE
ZM15008	240	240/415	1200	776	904	Three phase 4 wire WYE
ZM15200	340	120/240 split	700	416	528	Split phase 3 wire
ZM15201	340	120/208	700	416	528	Three phase 4 wire WYE
ZM15202	340	120/240	700/1200	416	528	Three phase 4 wire Delta
ZM15203	340	240	1200	832	1056	Three phase 3 wire Delta
ZM15204	340	277/480	1200	776	904	Three phase 4 wire WYE
ZM15206	340	480	2000	1552	1800	Three phase 3 wire Delta
ZM15207	340	220/380	1200	776	904	Three phase 4 wire WYE
ZM15208	340	240/415	1200	776	904	Three phase 4 wire WYE
ZM15300	400	120/240 split	700	416	528	Split phase 3 wire
ZM15301	400	120/208	700	416	528	Three phase 4 wire WYE
ZM15302	400	120/240	700/1200	416	528	Three phase 4 wire Delta
ZM15303	400	240	1200	832	1056	Three phase 3 wire Delta
ZM15304	400	277/480	1200	776	904	Three phase 4 wire WYE
ZM15306	400	480	2000	1552	1800	Three phase 3 wire Delta
ZM15307	400	220/380	1200	776	904	Three phase 4 wire WYE
ZM15308	400	240/415	1200	776	904	Three phase 4 wire WYE

^{*}Tested as per ANSI/IEEE C62.45; IEC 61643-1 $\rm U_{oc} = 6kV$



ZoneMaster
PRO disconnect
models have
LED lenses
which vary
in placement
and number
depending
on model
purchased.



Flush mount (without disconnect)

APPROVALS

Country	Standard/Authority	Approved for	Product
United States Canada	UL 1449 3rd Edition Listed (C-UL-US Listed)	AC power product	ZoneMaster PRO

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.





technical datasheet

ZoneMaster PRO Type 1 Series

Designed for all types of switchgear, distribution & branch panels, plus available with numerous options for a broad range of applications.

- Enhanced redundancy built into each module
- Thermal and short circuit fusing
- Surge counter with fault monitor and audible alarm
- Low let-through performance with high current impulses
- 200k AIC short circuit rating
- Replaceable bolt-in modules
- UL 1449 3rd Edition Listed
- UL Type1, In = 20kA, 200kA SCCR
- Meets UL96A Master Label Requirements
- 15 year product warranty

ZoneMaster PRO Series of surge protection devices combines all the advantages of all mode protection with features and options to meet the needs of the most complex protection requirements. The ZoneMaster PRO series is available with surge current capacities of 340kA and 400kA. This along with the different international voltages available make the ZoneMaster PRO the most versatile product on the market.

ZoneMaster PRO Series features modular construction, individual modules are bolted to a large surge return plate to minimize transient impedance. These color coded replaceable modules with a UL94-5V rated plastic casing are supplied mounted within a durable metal enclosure. The ZoneMaster PRO units are easy to install via simple surface mounting or optional flush mounting.



Large block Metal Oxide Varistor (MOV) protection technology is utilized within all the ZoneMaster PRO range. Each of the large block MOVs are individually fused for both thermal and short circuit protection. This provides redundancy ensuring the facility is never unprotected.

Status indication is provided through a front panel display, audible, and NO/NC remote alarm contacts. Individual module status is provided by LED status indication on each module. An optional remote monitoring unit is also available providing audible and visual indication of protection status, along with features such as a test switch for checking the monitoring circuitry and an audio alarm silence switch.

901-179 RevA 190911



All figures typical at 77°F (25°C) unless otherwise stated

Maximum continuous operating voltage

120V — 140Vac 240V — 280Vac

277V - 320Vac

Lines protected

ZoneMaster PRO 340

L-N 170kA, L-G 170kA, L-L 340kA, N-G 170kA

Delta — L-G 340kA, L-L 340kA

ZoneMaster PRO 400

L-N 200kA, L-G 200kA, L-L 400kA, N-G 200kA

Delta - L-G 400kA, L-L 400kA

Duty cycle performance (8/20µs)

100,000A >4 impulses 10,000A >8,000 impulses

200A infinite

Impulse current for class I (I_{imp}) 50kA (10/350µs)

Long duration current pulse (10/1,000µs) capability

3,600A (tested)

Ambient temperature limits

-40°F to +185°F (working) -40°C to +85°C (working)

Humidity

95% RH (non-condensing)

Enclosure

NEMA 1 (standard)

Terminals

2 AWG (32mm²)

Mounting

Surface mount via 0.31" (8mm) diameter holes or optional flush mount available

Indication

Continuous visual status monitoring

Green LED Lit = Full protection
Red LED Lit = Reduced (Standb

Reduced (Standby) *OR* No protection

Remote contacts

NO/NC

Weight 25.4 lbs (11.2kg)

Dimensions

Enclosure — see figure 1

NEMA 4X: 507 x 508 x 255mm (approx.)

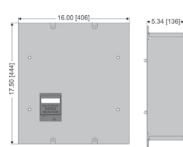
EMC compliance

monitor unit

BS EN 60950: 1992 BS EN 61000-6-2: 1999

	14.00 [356] 	← 7.31 [18
1		+5.47
[445]		0
-17.50 [445]		

ZoneMaster PRO disconnect models have LED lenses which vary in placement and number depending on model purchased.



Flush mount (without disconnect)

ORDERING INFORMATION

Model number as per specification table

Add suffix F for flush mount options Add suffix D for disconnect Add suffix O for NEMA 4 enclosure Add suffix S for NEMA 4X enclosure Add suffix R for battery powered remote

APPROVALS

Figure 1 Dimensions

Model

ZM15600

ZM15601

ZM15602

ZM15603

ZM15604

ZM15606

ZM15607

ZM15608

ZM15700

ZM15701

ZM15702

ZM15703

ZM15704

ZM15706

ZM15707

ZM15708

Maximum

surge current

Imax (kA)

340

340

340

340

340

340

340

340

400

400

400

400

400

400

400

400

*Tested as per ANSI/IEEE C62.45; IEC 61643-1 U_{oc} = 6kV

Working

voltage

(V)

120/240 split

120/208

120/240

240

277/480

480

220/380

240/415

120/240 split

120/208

120/240

240

277/480

480

220/380

240/415

UL 3rd

Edition VPR

(V)

700

700

700/1200

1200

1200

2000

1200

1200

700

700

700/1200

1200

1200

2000

1200

1200

Limiting voltage

@3kA* @10kA (In)

(V)

528

528

528

1056

904

1800

904

904

528

528

528

1056

904

1800

904

904

(V)

416

416

416

832

776

1552

776

776

416

416

416

832

776

1552

776

776

Phase types

Split phase 3 wire

Three phase 4 wire WYE

Three phase 4 wire Delta

Three phase 3 wire Delta

Three phase 4 wire WYE

Three phase 3 wire Delta

Three phase 4 wire WYE

Three phase 4 wire WYE

Three phase 4 wire WYE

Three phase 4 wire Delta

Three phase 3 wire Delta

Three phase 4 wire WYE

Three phase 3 wire Delta

Three phase 4 wire WYE

Three phase 4 wire WYE

Split phase 3 wire

Country	Standard/Authority	Approved for	Product
United States	UL 1449 3rd Edition /UL	AC power product	ZoneMaster PRO Type 1

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