

EPIK Motor Starters

EXPLOSION-PROTECTED MOTOR CONTROLS



CONTROLS



EPIK

Features:

- Class I, Division 2, Zone 2 certified Motor Starter Panel
- Using explosion-protected components such as contactor, overload relay and disconnect switch
- Perfect for applications requiring Motor Protection such as Across-the-Line, Combination Starter and Manual Starter with Overload Protection
- Enclosure provides flexibility for entries. No factory drilling and tapping required
- No cable seals or conduit seals are required, allowing for fast installation and lowering overall installation cost
- Cost effective solution due to proximity to equipment, reducing wiring length and size
- Lightweight solution compared to explosion cast systems
- Padlockable handle in 3 positions



Explosion Protection by R. STAHL sales.us@r-stahl.com



CLASSIFICATIONS

NEC®

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

 FM16US0023X

Canadian Electrical Code

Zone 2 IIC T4

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

 FM16CA0018X

Ambient Temperature

-20°C ... +40°C

-4°F ... +104°F

*Entries and options may change protection.

**For other certifications, consult factory.

EPIK Motor Starters are available as Across-the-Line, Combination Starters with Motor Circuit Protection, Manual Starter with Overload Protection and Fused Combination Starter. Our motor range spans from 2 hp up to 30 hp. 50 hp is coming soon.

If the system you need is not on our standard offer, contact your R. STAHL representative for a customized solution.

EXPLOSION-PROTECTED MOTOR CONTROLS

EPIK is engineered specifically for hazardous locations and outdoor environments, such as Class I, Division 2, Groups A,B,C,D T4 and Zone 2 IIC T4. They are ideal for use in refineries, LNG liquefaction plants, oil sands, chemical and petrochemical facilities, and wastewater facilities with indoor or outdoor installation. These panels are suitable for applications that require overload protection and circuit protection on motor applications for up to 30 hp.

Enclosure

The enclosure of the panel is made of 316L stainless steel material, providing high corrosion resistance for extended lifespan and improved safety of the system. The seamless silicone foam in-place gaskets exclude contaminants and liquids, ensuring the long life of interior components. The panel has a standard bottom entry design that reduces the risk of moisture ingress. Panel comes with pre-punched cover entries for field installation of control actuators. Options can be selected from the list of accessories such as pilot lights and pushbuttons. If a transformer is required, this can also be selected and installed by the user (available in the accessory section).

Explosion-Protected Components

EPIK utilizes R. STAHL series of motor circuit protection, contactors, overload relays specifically designed for motor protection. Each component is explosion-protected by means of a flameproof housing made of non-metallic materials allowing for great heat dissipation and factory-made flame path that is inaccessible to the the users, guaranteeing Ex protection at all times.

Advantages

EPIK offers several advantages over traditional explosionproof cast systems. It eliminates the need of conduit seals and eliminates the need to remove dozens of bolts when accessing the components. This lightweight panel reduces the need for expensive lift equipment. Due to being 316L SS material, the panel can be installed outdoors, closer to the motor, minimizing cable length and cable size. All these features translate into faster installation and lower overall cost.

Safety Features

EPIK is designed with finger-safe construction to prevent accidental contact with live parts. External handles are padlockable for added safety. The 316L SS enclosure can be opened without losing the explosion protection; this is because the Ex protection comes from each component.

MANUAL MOTOR STARTER WITH OVERLOAD PROTECTION



- 316L SS enclosure
- Integral Manual Circuit Protection (MCP) - Magnetic protection and overload protection in one unit
- Screw cover
- Dimensions on page F6



CLASSIFICATIONS

NEC®

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

 FM16US0023X

Canadian Electrical Code

Zone 2 IIC T4

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

 FM16CA0018X

Ambient Temperature

-20°C ... +40°C

-4°F ... +104°F

*Entries and options may change protection.

**For other certifications, consult factory.

Ordering Information

Operating Voltage (V AC) 50 / 60 Hz	Phases	Horsepower Rating	FLA per NFPA 430 (AMP)	Overload Range Amps	Catalog Number	SAP / Art. No.
240	3	3	9.6	10.0 - 16.0	7150/5-V23-04-030-000-240	285374
		5	15.2	10.0 - 16.0	7150/5-V23-04-050-000-240	285375
480	3	5	7.6	6.0 - 10.0	7150/5-V23-04-050-000-480	285376
		7.5	11	10.0 - 16.0	7150/5-V23-04-075-000-480	285377
		10	14	10.0 - 16.0	7150/5-V23-04-100-000-480	285378
		15	21	16 - 22.5	7150/5-V23-04-150-000-480	285379

Note: Product without entries, please see page F10 for field entry hubs and cable gland options.



CLASSIFICATIONS

NEC®

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

FM16US0023X

Canadian Electrical Code

Zone 2 IIC T4

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

FM16CA0018X

Ambient Temperature

-20°C ... +40°C

-4°F ... +104°F

*Entries and options may change protection.

**For other certifications, consult factory.

ACROSS-THE-LINE MOTOR STARTER



- 316L SS enclosure
- Auxiliary contacts
- Contactor + 2 NO / 2 NC aux. contacts
- Overload protection relay + 1 NO / 1 NC aux. contact
- 3x plugged blank entries for customer selection of actuators
- Dimensions on page F6

Ordering Information

Operating Voltage (V AC) 50 / 60 Hz	Phases	Horsepower Rating	FLA per NFPA 430 (AMP)	Overload Range Amps	Catalog Number	SAP / Art. No.
120	1	2	24	12.5 - 45	7150/5-V23-01-020-120-120	285323
240	3	5	15.2	10.0 - 16.0	7150/5-V23-01-050-120-240	285325
		7.5	22	16 - 22.5	7150/5-V23-01-075-120-240	285328
		15	42	12.5 - 45	7150/5-V23-01-150-120-240	285363
480	3	5	7.6	6.0 - 10.0	7150/5-V23-01-050-120-480	285326
		7.5	11	10.0 - 16.0	7150/5-V23-01-075-120-480	285329
		10	14	10.0 - 16.0	7150/5-V23-01-100-120-480	285361
		15	21	16 - 22.5	7150/5-V23-01-150-120-480	285364
		30	40	12.5 - 45	7150/5-V23-01-300-120-480	285366
600	3	5	6.1	6.0 - 10.0	7150/5-V23-01-050-120-600	285327
		7.5	9	6.0 - 10.0	7150/5-V23-01-075-120-600	285330
		10	11	10.0 - 16.0	7150/5-V23-01-100-120-600	285362
		15	17	16 - 22.5	7150/5-V23-01-150-120-600	285365
		30	32	12.5 - 45	7150/5-V23-01-300-120-600	285367

Note: Product without entries, please see page F10 for field entry hubs and cable gland options.

Actuators & contact blocks available on pages F8 & F9.

50 hp option available upon request.

COMBINATION MOTOR STARTER



- 316L SS enclosure
- Magnetic overload protection included
- Auxiliary contacts
- Contactor + 2 NO / 2 NC aux. contacts
- Overload protection relay + 1 NO / 1 NC aux. contact
- 3x plugged blank entries for customer selection of actuators
- Dimensions on page F6

Ordering Information

Operating Voltage (V AC) 50 / 60 Hz	Phases	Horsepower Rating	FLA per NFPA 430 (AMP)	Overload Range Amps	Catalog Number	SAP / Art. No.
240	3	3	9.6	10.0 - 16.0	7150/5-V23-02-030-120-240	285368
		5	15.2	10.0 - 16.0	7150/5-V23-02-050-120-240	285369
480	3	5	7.6	6.0 - 10.0	7150/5-V23-02-050-120-480	285370
		7.5	11	10.0 - 16.0	7150/5-V23-02-075-120-480	285371
		10	14	10.0 - 16.0	7150/5-V23-02-100-120-480	285372
		15	21	16 - 22.5	7150/5-V23-02-150-120-480	285373

Note: Product without entries, please see page F10 for field entry hubs and cable gland options.
 Actuators & contact blocks available on pages F8 & F9.
 50 hp option available upon request.



CLASSIFICATIONS

NEC®

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

 FM16US0023X

Canadian Electrical Code

Zone 2 IIC T4

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

 FM16CA0018X

Ambient Temperature

-20°C ... +40°C

-4°F ... +104°F

*Entries and options may change protection.

**For other certifications, consult factory.



CLASSIFICATIONS

NEC®

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

FM16US0023X

Canadian Electrical Code

Zone 2 IIC T4

Class I, Division 2, Groups A,B,C,D T4

*Enclosure Type 3, 4, 4X, IP66

FM16CA0018X

Ambient Temperature

-20°C ... +40°C

-4°F ... +104°F

*Entries and options may change protection.

**For other certifications, consult factory.

FUSED COMBINATION STARTER



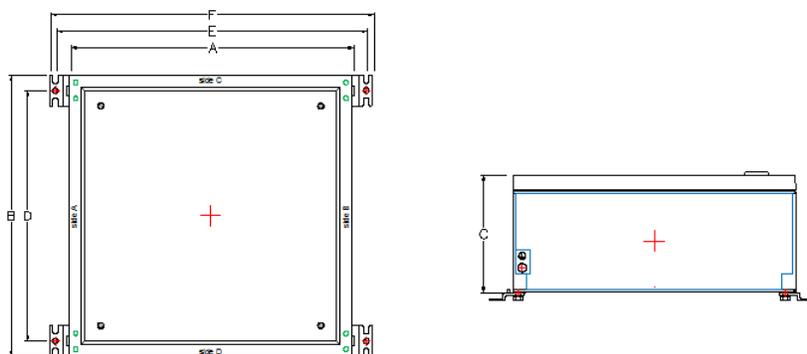
- 316L SS enclosure
- Load rated disconnect switch
- Contactor + 2 NO / 2 NC aux. contacts
- Overload protection relay + 1 NO / 1 NC aux. contact
- Fused
- 3x plugged blank entries for customer selection of actuators
- Allows for standard interrupting ratings to 20 kA
- Dimensions on page F6

Ordering Information

Operating Voltage (V AC) 50 / 60 Hz	Phases	Horsepower Rating	FLA per NFPA 430 (AMP)	Overload Range Amps	Catalog Number	SAP / Art. No.
480	3	30	40	12.5 - 45	7150/5-V23-05-300-120-480	285380
600	3	30	32	12.5 - 45	7150/5-V23-05-300-120-600	285381

Note: Product without entries, please see page F10 for field entry hubs and cable gland options.

Actuators & contact blocks available on pages F8 & F9.



Dimensions in inches (mm) - Subject to Alterations

Catalog Number	SAP / Art. No.	A	B	C	D	E	F
Across-the-Line Motor Starter							
7150/5-V23-01-020-120-120	285323	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-050-120-240	285325	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-075-120-240	285328	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-015-120-240	285363	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-050-120-480	285326	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-075-120-480	285329	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-100-120-480	285361	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-150-120-480	285364	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-300-120-480	285366	15.75 (400)	23.62 (600)	9.05 (230)	22.05 (560)	17.17 (436)	17.80 (452)
7150/5-V23-01-050-120-600	285327	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-075-120-600	285330	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-100-120-600	285362	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-150-120-600	285365	11.81 (300)	15.75 (400)	9.05 (230)	14.17 (360)	13.23 (336)	13.86 (352)
7150/5-V23-01-300-120-600	285367	15.75 (400)	23.62 (600)	9.05 (230)	22.05 (560)	17.17 (436)	17.80 (452)
Combination Starter Motor Starter							
7150/5-V23-02-030-120-240	285368	15.75 (400)	15.75 (400)	9.05 (230)	14.17 (360)	17.17 (436)	17.80 (452)
7150/5-V23-02-050-120-240	285369	15.75 (400)	15.75 (400)	9.05 (230)	14.17 (360)	17.17 (436)	17.80 (452)
7150/5-V23-02-050-120-480	285370	15.75 (400)	15.75 (400)	9.05 (230)	14.17 (360)	17.17 (436)	17.80 (452)
7150/5-V23-02-075-120-480	285371	15.75 (400)	15.75 (400)	9.05 (230)	14.17 (360)	17.17 (436)	17.80 (452)
7150/5-V23-02-100-120-480	285372	15.75 (400)	15.75 (400)	9.05 (230)	14.17 (360)	17.17 (436)	17.80 (452)
7150/5-V23-02-150-120-480	285373	15.75 (400)	15.75 (400)	9.05 (230)	14.17 (360)	17.17 (436)	17.80 (452)
Manual Starter with Overload Protection							
7150/5-V23-04-030-000-240	285374	7.87 (200)	11.81 (300)	5.91 (150)	10.24 (260)	9.29 (236)	9.92 (252)
7150/5-V23-04-050-000-240	285375	7.87 (200)	11.81 (300)	5.91 (150)	10.24 (260)	9.29 (236)	9.92 (252)
7150/5-V23-04-050-000-480	285376	7.87 (200)	11.81 (300)	5.91 (150)	10.24 (260)	9.29 (236)	9.92 (252)
7150/5-V23-04-075-000-480	285377	7.87 (200)	11.81 (300)	5.91 (150)	10.24 (260)	9.29 (236)	9.92 (252)
7150/5-V23-04-100-000-480	285378	7.87 (200)	11.81 (300)	5.91 (150)	10.24 (260)	9.29 (236)	9.92 (252)
7150/5-V23-04-150-000-480	285379	7.87 (200)	11.81 (300)	5.91 (150)	10.24 (260)	9.29 (236)	9.92 (252)
Fused Combination Starter							
7150/5-V23-05-300-120-480	285380	18.90 (480)	30.98 (787)	9.05 (230)	29.41 (747)	20.31 (516)	20.94 (532)
7150/5-V23-05-300-120-600	285381	18.90 (480)	30.98 (787)	9.05 (230)	29.41 (747)	20.31 (516)	20.94 (532)

Note: Actual Dimensions may be different based on entries, actuators, or other options.



CLASSIFICATIONS

NEC®

Class I, Zone 1, AEx e IIC Gb
Zone 21, AEx tb IIIC Db

Canadian Electrical Code

Ex eb IIC Gb U
Ex tb IIIC Db

us E182378

ATEX

Ⓢ II 2 G Ex eb IIC Gb
Ⓢ II 2 D Ex tb IIIC Db

PTB 13 ATEX 1019 U

IECEX

Ex eb IIC Gb
Ex tb IIIC Db

IECEX PTB 13.0047U

Ambient Temperature

-60°C ... +70°C
-76°F ... +158°F



Ordering Information

Description	Catalog Number	SAP / Art. No.
Momentary black pushbutton kit	8602C3-001-S	223692
Indicator lamp actuator kit including colored lenses	8602C3-054-S-C06	223123
Illuminated pushbutton kit including colored lenses	8602C3-735-S-C06	244655
Padlock switch, 2-position kit	8602C3-727-S-M01-02-E08	244651
Padlock switch, 3-position kit	8602C3-727-S-M03-03-E03	244653
Key-operated switch 2-position kit including 2 keys MS1	8602C3-008-S-M01-02-MS01	244574
Key-operated switch 3-position kit including 2 keys MS1	8602C3-008-S-M03-03-MS01	244633

Note:

- Kits include panel mount bracket and hardware
- Switches are configurable in the field for conversion to “spring return” or “key not removable” function.
- Colors include RD, WH, YE, GN and BU



CONTROL BLOCKS
NORTH AMERICAN CERTIFIED



Ordering Information



Description	Catalog Number	SAP / Art. No.
Contact block N.C. 1 piece	8082C3-21-1-0	315695
Contact block N.C. 10 pieces	8082C3-21-1-0	315697
Contact block N.O. 1 piece	8082C3-21-2-0	315696
Contact block N.O. 10 pieces	8082C3-21-2-0	315698
Contact block N.C. + N.O. 5 pieces	8082C3-21-3-0	315699

CLASSIFICATIONS

8082/3 Contact Blocks

NEC®

Class I, Division 2, Groups A,B,C,D
Class I, Zone 1, AEx db eb IIC T6

Canadian Electrical Code

Class I, Zone 1, Ex db eb IIC T6
Class I, Division 2, Groups A,B,C,D



ATEX

II 2 G Ex db eb IIC Gb
PTB 17 ATEX 1012 U

IECEx

Ex db eb IIC Gb
IECEx PTB 17.0037U

Ambient Temperature

-60°C ... +85°C
-76°F ... +185°F

Ordering Information



Description	Catalog Number	SAP / Art. No.
LED module 1 piece	8010C6-21-1	315700
LED module 5 pieces	8010C6-21-1	315711

CLASSIFICATIONS

8010 LED Module

NEC®

Class I, Division 2, Groups A,B,C,D
Class I, Zone 1, AEx db eb IIC T6

Canadian Electrical Code

Ex db eb IIC T6
Class I, Division 2, Groups A,B,C,D



ATEX

II 2 G Ex db eb IIC Gb
PTB 17 ATEX 1005 U

IECEx

Ex db eb IIC Gb
IECEx PTB 17.0022U

Ambient Temperature

-60°C ... +75°C
-76°F ... +167°F

Note:

For control power transformer, source a NEC® or Canadian Electrical Code compliant control power transformer. Mounting pan is predrilled for several manufacture or control power transformers.



CLASSIFICATIONS

8166/11 Conduit Hubs

NEC®

Class I, Zone 1, AEx e IIC
 Class I, Division 2, Groups A,B,C,D
 Class II, Division 2, Groups F,G
 Class III

Canadian Electrical Code

Zone 1, Ex e IIC
 Class I, Division 2, Groups A,B,C,D
 Class II, Division 2, Groups F,G
 Class III

Environmental Protection
 NEMA 3, 4 and 4X; IP66



Ambient Temperature

-30°C ... +100°C
 -22°F ... +212°F

Grounding Terminal Capacity:
 One or two copper wires,
 14 to 8 AWG, solid or stranded

CLASSIFICATIONS

TMC Cable Glands

NEC®

Class I, Zone 1 & 2, AEx e IIC
 Class I, Division 2, Groups A,B,C,D
 Class II, Division 1 & 2, Groups E,F,G

Canadian Electrical Code

Zone 1 & 2, Ex e IIC
 Class I, Division 2, Groups A,B,C,D
 Class II, Division 1 & 2, Groups E,F,G

Environmental Protection
 NEMA 3, 4 and 4X; IP66



Continuous Operating Temperature

-60°C ... +130°C
 -76°F ... +266°F

CONDUIT HUBS / CABLE GLANDS
 NORTH AMERICAN CERTIFIED



Hazardous Location Conduit Hubs with Grounding Terminal

Ordering Information

Catalog Number	Size NPT	Enclosure Thru Hole I.D.	SAP / Art. No.
8166/11-01-NE	1/2"	7/8"	139082
8166/11-02-NE	3/4"	1-1/8"	139083
8166/11-03-NE	1"	1-3/8"	139084
8166/11-04-NE	1-1/4"	1-3/4"	139085
8166/11-05-NE	1-1/2"	2"	139086
8166/11-06-NE	2"	2-1/2"	139087
8166/11-07-NE	2-1/2"	3"	139088



TMC Cable Glands - Nickel Plated Brass For MC, MC-HL, Interlocked & TECK Armored Cables

Ordering Information (Dimensions in Inches)

Catalog Number	Cable Gland Size NPT	Max. Cable Armor Dia.				Cable Jacket Diameter		SAP / Art. No.
		End Stop In		End Stop Out		Min.	Max.	
		Min.	Max.	Min.	Max.			
TMC050SNB	1/2"	--	--	0.342	0.503	0.354	0.550	254316
TMC050NB	1/2"	--	--	0.437	0.669	0.510	0.787	254317
TMC075NB	3/4"	0.591	0.756	0.756	0.917	0.669	1.035	106090
TMC100NB	1"	0.775	0.969	0.969	1.150	0.910	1.268	106091
TMC125NB	1-1/4"	1.083	1.228	1.228	1.386	1.161	1.504	254320
TMC150NB	1-1/2"	1.320	1.461	1.461	1.618	1.402	1.736	254321
TMC200SNB	2"	1.508	1.677	1.677	1.854	1.579	2.008	254322
TMC200NB	2"	1.772	1.933	1.933	2.087	1.858	2.205	254323
TMC250SNB	2-1/2"	2.052	2.161	2.161	2.320	2.079	2.441	254324
TMC250NB	2-1/2"	2.247	2.406	2.406	2.545	2.327	2.677	254325
TMC300NB	3"	2.543	2.776	2.776	2.965	2.622	3.126	254326
TMC350NB	3-1/2"	2.91	3.291	3.291	3.485	2.992	3.830	254327

Note: For more information regarding these accessories see Section K.

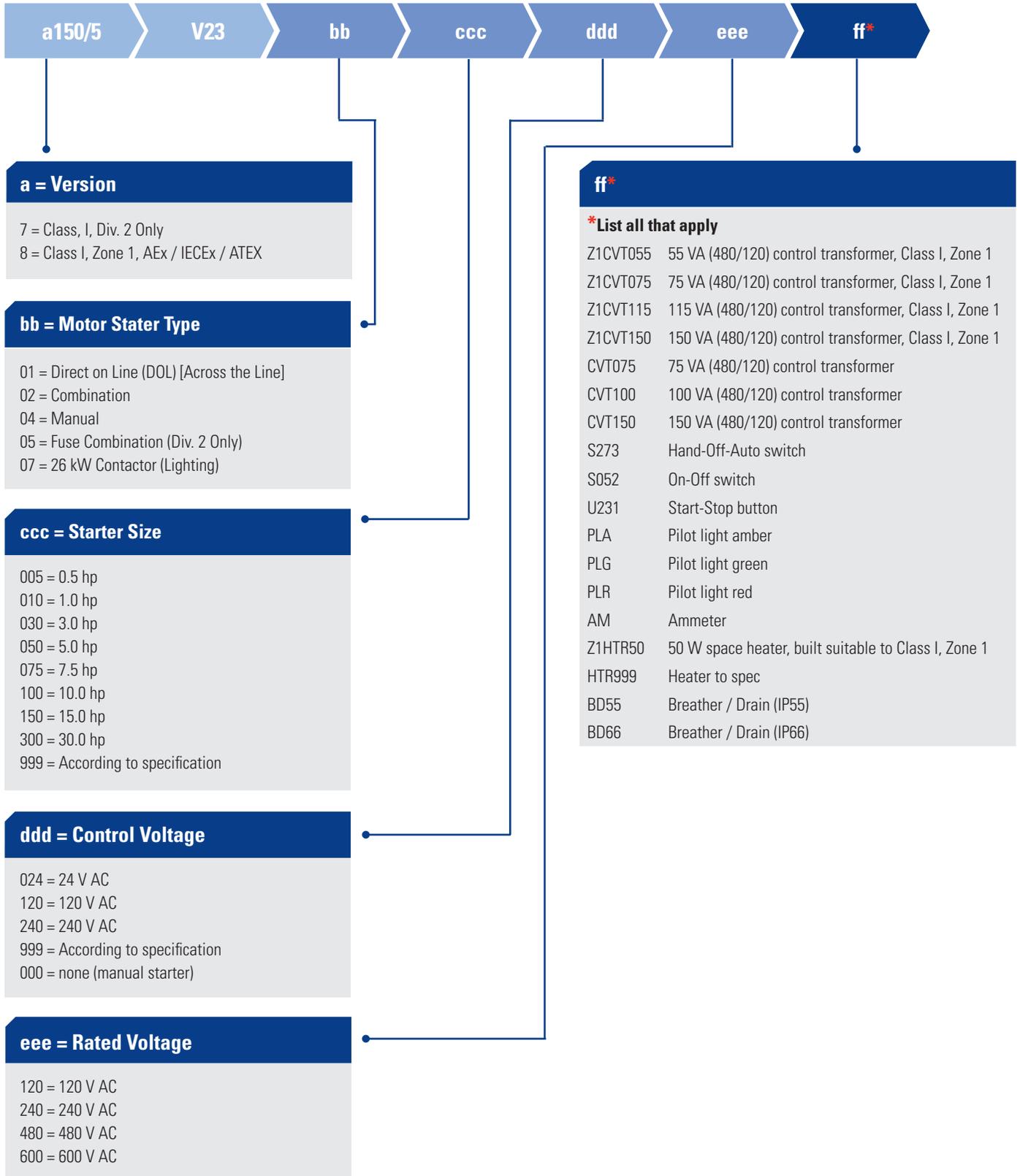
For other Material Options for the TMC Cable Glands and for international cable entry, please contact factory.



CUSTOM CONFIGURATION LOGIC

Start Here

Example
8150/5-V23-07-300-240-PLA



Note: All options are not possible in all configurations. An expert will review your request and recommend a solution.

LOOK FOR OUR OTHER SOLUTIONS



**FOR MORE INFORMATION CONTACT YOUR
R. STAHL REPRESENTATIVE**



R. STAHL, INC.
13259 N. Promenade Blvd
Stafford, TX 77477
USA
+1 800 782 4357
rstahl.com

R. STAHL, LTD.
8925 51 Avenue NW, Unit 303
Edmonton, AB T6E 5J3
Canada
+1 877 416 4302
rstahl.com