

1336S

First Position

Bulletin Number

BR

Second Position

Voltage

Letter	Voltages
AQ	200-240V AC or 310V DC
BR	380-480V AC or 513-620V DC
CW	500-600V AC or 775V DC

or

A	200-240V AC
B	380-480V AC
BP	380-480V AC (F Frame)
BX	Special Rating
C	500-600V AC
Q	310V DC
R	513-620V DC
RX	Special Rating
W	775V DC

F30

Third Position

Nominal HP Rating

Code	kW (HP)
F05	0.37 (0.5)
F07	0.56 (0.75)
F10	0.75 (1)
F15	1.2 (1.5)
F20	1.5 (2)
F30	2.2 (3)
F50	3.7 (5)
F75	5.5 (7.5)
F100	7.5 (10)

007	5.5 (7.5)
010	7.5 (10)
015	11 (15)
020	15 (20)
025	18.5 (25)
030	22 (30)
040	30 (40)
050	37 (50)
060	45 (60)
075	56 (75)
100	75 (100)
125	93 (125)
150	112 (150)
200	149 (200)
250	187 (250) ¹
300	224 (300) ¹
350	261 (350) ¹
400	298 (400) ¹
450	336 (450) ¹
500	373 (500) ¹
600	448 (600) ¹

AA

Fourth Position

Enclosure Type

Code	Type
AA	IP 20 (NEMA 1)
AE	IP 20 (NEMA 1)/ EMC 0.37-45 kW (0.5-60 HP) only
AF	IP 65 (NEMA 4) ²
AJ	IP 54 (NEMA 12) ²
AN	IP 00 (Open)

EN

Fifth Position

Language

Code	Language
EN3	English/English V3.04
EN4	English/English V4.xx
FR3	English/French V3.04
FR4	English/French V4.xx
DE3	English/German V3.04
DE4	English/German V4.xx
IT3	English/Italian V3.04
IT4	English/Italian V4.xx
ES3	English/Spanish V3.04
ES4	English/Spanish V4.xx

MODS

Sixth Position

Options

Code Description

Human Interface Module, IP 20 (Type 1)

HAB	Blank – No Functionality
HAP	Programmer Only
HA1	Programmer/Controller w/Analog Pot
HA2	Programmer/Controller w/Digital Pot

Human Interface Module, IP 65/54 (Type 4/12)

HJP	Programmer Only
HJ2	Programmer/Controller w/Digital Pot

Code Description

Communication Options

GM1	Single Point Remote I/O
GM2	RS-232/422/485, DF1 & DH485
GM5	DeviceNet

Control Interface Options

L4	TTL Contact
L4E	TTL Contact & Encoder Feedback
L5	24V AC/DC
L5E	24V AC/DC & Encoder Feedback
L6	115V AC
L6E	115V AC & Encoder Feedback

¹ G Frame Drives in enclosed construction are supplied through the *Configured Drives Program*.² D through G Frame drives in IP 65 (NEMA Type 4) and IP 54 (NEMA Type 12) configurations are supplied through the *Configured Drives Program*.

Input Fusing



ATTENTION: The 1336 PLUS does not provide input power short circuit fusing. Specifications for the recommended fuse size and type to provide drive input power protection against short circuits are provided. Branch circuit breakers or disconnect switches cannot provide this level of protection for drive components.

Table 2.A
Maximum Recommended AC Input Line Fuse Ratings (fuses are user supplied)

European Installations	North American Installations	Drive Catalog Number	kW (HP) Rating	200-240V Rating	380-480V Rating	500-600V Rating
The recommended fuse is Class gG, general industrial applications and motor circuit protection. BS88 (British Standard) Parts 1 & 2*, EN60269-1, Parts 1 & 2, type gG or equivalent should be used for these drives. Fuses that meet BS88 Parts 1 & 2 are acceptable for Frames A - F. * Typical designations include, but may not be limited to the following: Parts 1 & 2: AC, AD, BC, BD, CD, DD, ED, EFS, EF, FF, FG, GF, GG, GH.	UL requirements specify that UL Class CC, T or J¹ fuses must be used for all drives in this section*. * Typical designations include: Type CC: KTK, FNQ-R Type J: JKS, LPJ Type T: JJS, JJN	1336S-__ F05, 7	0.37-0.56 (0.5-0.75)	6A ²	3A ²	—
		1336S-__ F10	0.75 (1)	10A ²	6A ²	6A ²
		1336S-__ F15	1.2 (1.5)	15A ²	6A ²	—
		1336S-__ F20	1.5 (2)	15A ²	10A ²	10A ²
		1336S-__ F30	2.2 (3)	25A ²	15A ²	15A ²
		1336S-__ F50	3.7 (5)	40A ²	20A ²	20A ²
		1336S-__ F75	5.5 (7.5)	—	20A ²	—
		1336S-__ F100	7.5 (10)	—	30A ²	—
		1336S-__ 007	5.5 (7.5)	40A	20A	15A
		1336S-__ 010	7.5 (10)	50A	30A	20A
		1336S-__ 015	11 (15)	70A	35A	25A
		1336S-__ 020	15 (20)	100A	45A	35A
		1336S-__ 025	18.5 (25)	100A	60A	40A
		1336S-__ 030	22 (30)	125A	70A	50A
		1336S-__ 040	30 (40)	150A	80A	60A
		1336S-__ 050	37 (50)	200A	100A	80A
		1336S-__ X060	45 (60)	—	100A	—
		1336S-__ 060	45 (60)	250A	125A	90A
		1336S-__ 075	56 (75)	300A	150A	110A
		1336S-__ 100	75 (100)	400A	200A	150A
		1336S-__ 125	93 (125)	450A	250A	175A
		1336S-__ X150	112 (150)	—	250A	—
		1336S-__ 150	112 (150)	—	300A	225A
		1336S-__ 200	149 (200)	—	400A	350A
		1336S-__ 250	187 (250)	—	450A	400A
		1336S-__ X300	224 (300)	—	—	400A
The recommended fuse is Class gG, general industrial applications and motor circuit protection. BS88 (British Standard) Part 4, EN60269-1, Part 4*, type gG semi-conductor fuses or equivalent should be used for these drives. G Frame drives require semiconductor fuses and should be fused with Part 4 fuses. * Typical designations include, but may not be limited to the following: Part 4: CT, ET, FE, EET, FEE, RFEE, FM, FMM.	Bussmann FWP/Gould Shawmut A-70Q or QS semiconductor type fuses must be used for all drives in this section.	1336S-__ P250 ³	187 (250)	—	450A ³	—
		1336S-__ X250	187 (250)	—	450A	—
		1336S-__ 300	224 (300)	—	450A	400A
		1336S-__ P300 ³	224 (300)	—	500A ³	—
		1336S-__ 350	261 (350)	—	500A	450A
		1336S-__ P350 ³	261 (350)	—	600A ³	—
		1336S-__ 400	298 (400)	—	600A	500A
		1336S-__ P400 ³	298 (400)	—	600A ³	—
		1336S-__ 450	336 (450)	—	800A	600A
		1336S-__ P450 ³	336 (450)	—	700A ³	—
		1336S-__ 500	373 (500)	—	800A	800A
		1336S-__ 600	448 (600)	—	900A	800A

¹ Both fast acting and slow blow are acceptable.

² Dual element-time delay fuses are required.

³ Fuses are supplied with F Frame drives.

Table 2.C
TB1 Specifications – Use 75° C Copper wire Only

Drive Frame Size	Max./Min. Wire Size ¹ <i>mm² (AWG)</i>	Maximum Torque <i>N-m (lb.-in.)</i>
A1-A4 (page 2-18)	5.3/0.8 (10/18)	1.81 (16)
B1 (page 2-18)	8.4/0.8 (8/18)	1.81 (16)
B2 (page 2-18)	13.3/0.5 (6/20)	1.70 (15)
C (page 2-18)	26.7/0.8 (3/18)	5.65 (50)
D (page 2-19) ³	127.0/2.1 (250 MCM/14) 67.4/2.1 (00/14) ²	6.00 (52) 6.00 (52)
E (page 2-19) ³	253.0/2.1 (500 MCM/14)	10.00 (87)
F (page 2-20) ³	303.6/2.1 (600 MCM/14)	23.00 (200)
G (page 2-20) ³	303.6/2.1 (600 MCM/14)	23.00 (200)

¹ Wire sizes given are maximum/minimum sizes that TB1 will accept – these are not recommendations.

² Applies to 30 kW (40 HP) 200-240V, 45 & 56 kW (60 & 75 HP) 380-480V, 56 kW (75 HP) 500-600V drives only.

³ These configurations of TB1 are stud type terminations and require the use of lug type connectors to terminate field installed conductors. Lug kits are available for use with these configurations. Wire size used is determined by selecting the proper lug based on the drive catalog number. Refer to Table 2.D.

Lug Kits

D, E, F and G Frame drives have stud type terminals and/or bus bars/bolts that require standard “crimp type” connectors for cable termination. Connectors such as T & B Color-Keyed[®] connectors (or equivalent) are recommended. The following table shows the lug selection for one possible cable choice. Connectors for each installation should be chosen based on desired cable sizes, the application requirements and all applicable national, state and local codes. See the minimum/maximum values for wire size per Table 2.C.