

**BALDOR • RELIANCE**

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# Customer information packet

## CEM4104T

30HP, 1760RPM, 3PH, 60HZ, 286TC, 1056M, TEFC, F

Class - None

Division - Not Applicable

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## Specifications

Enclosure	TEFC
Frame	286TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	78.000 A @ 208.0 V 76.000 A @ 230.0 V 38.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

## Part detail

Revision	AH
Type	AC
Mech. spec.	10C152
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYC152
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	05-17-2010

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

**NP3443LUA**

<b>CAT.NO.</b>	CEM4104T			<b>CUST. P/N</b>				<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	10C152Y538G1	<b>CC</b>	010A	<b>FRAME</b>	286TC		<b>SER.NO.</b>		
<b>HP</b>	30		<b>CLASS</b>	F		<b>HZ</b>	60		
<b>R.P.M.</b>	1760		<b>PH.</b>	3		<b>DES.</b>	A		
<b>VOLTS</b>	230/460			<b>CODE</b>	J		<b>ODE BRG</b>	6309	<b>DE BRG</b> 6311
<b>AMPS</b>	76/38								
<b>RATING</b>	40C AMB-CONT			<b>NEMA NOM. EFF.</b>	93.6		<b>GREASE</b>	POLYREX EM	
<b>P.F.</b>	80	<b>SER.F.</b>	1.15				<b>CT6-60H(10:1)VT3-60H(20:1)</b>		
<b>USABLE AT</b>	50Hz 30HP 190/380V 88/44A			<b>SF1.0</b>					
<b>VOLTS</b>	<b>AMPS</b>			<b>MAX. SPACE HEATER TEMP.</b>					

## Parts list

Part number	Description	Quantity
SA195707	SA 10C152Y538G1	1.000 ea
RA183244	RA 10C152Y538G1	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
10EP1106A01	FR ENDPLATE, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10EP1305A01	PU ENDPLATE, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10FH4000	310 FAN HOUSING STAMPED	1.000 ea
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3443LUA	SS SUPER-E,CURUS-EEV,NEMA PREM, CC	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

**AC Induction Motor Performance Data**

Record # 32189

Typical performance - not guaranteed values

<b>Winding: 10WGY538-R004</b>		<b>Type: 1056M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	30		<b>Full Load Torque</b>	88.7 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	76/38		<b>Breakdown Torque</b>	330 LB-FT	
<b>R.P.M.</b>	1760		<b>Pull-up Torque</b>	142 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	178 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	J	<b>Starting Current</b>	270 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	17.9 A	
<b>NEMA Nom. Eff.</b>	<b>93.6 Power Factor</b>	80	<b>Line-line Res. @ 25°C</b>	0.19377 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	64°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	76°C	
			<b>Locked-rotor Power Factor</b>	30.9	
			<b>Rotor inertia</b>	4.47 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 30 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	41	63	73	80	82	85	81
<b>Efficiency</b>	87.6	92.3	93.5	93.7	93.4	92.9	93.5
<b>Speed</b>	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
<b>Line amperes</b>	19.8	24.3	30.7	37.6	45.6	55.2	42.4



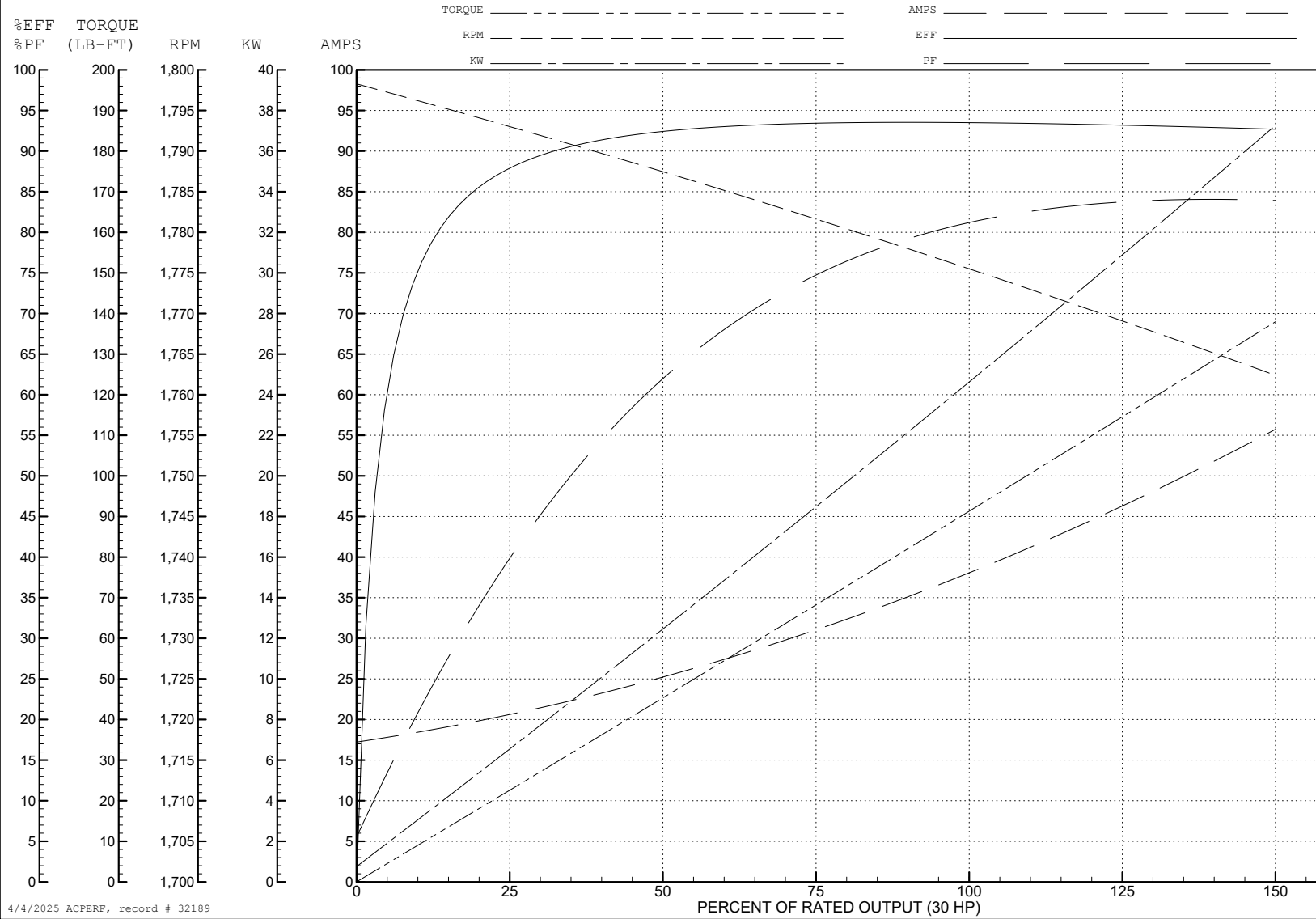
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

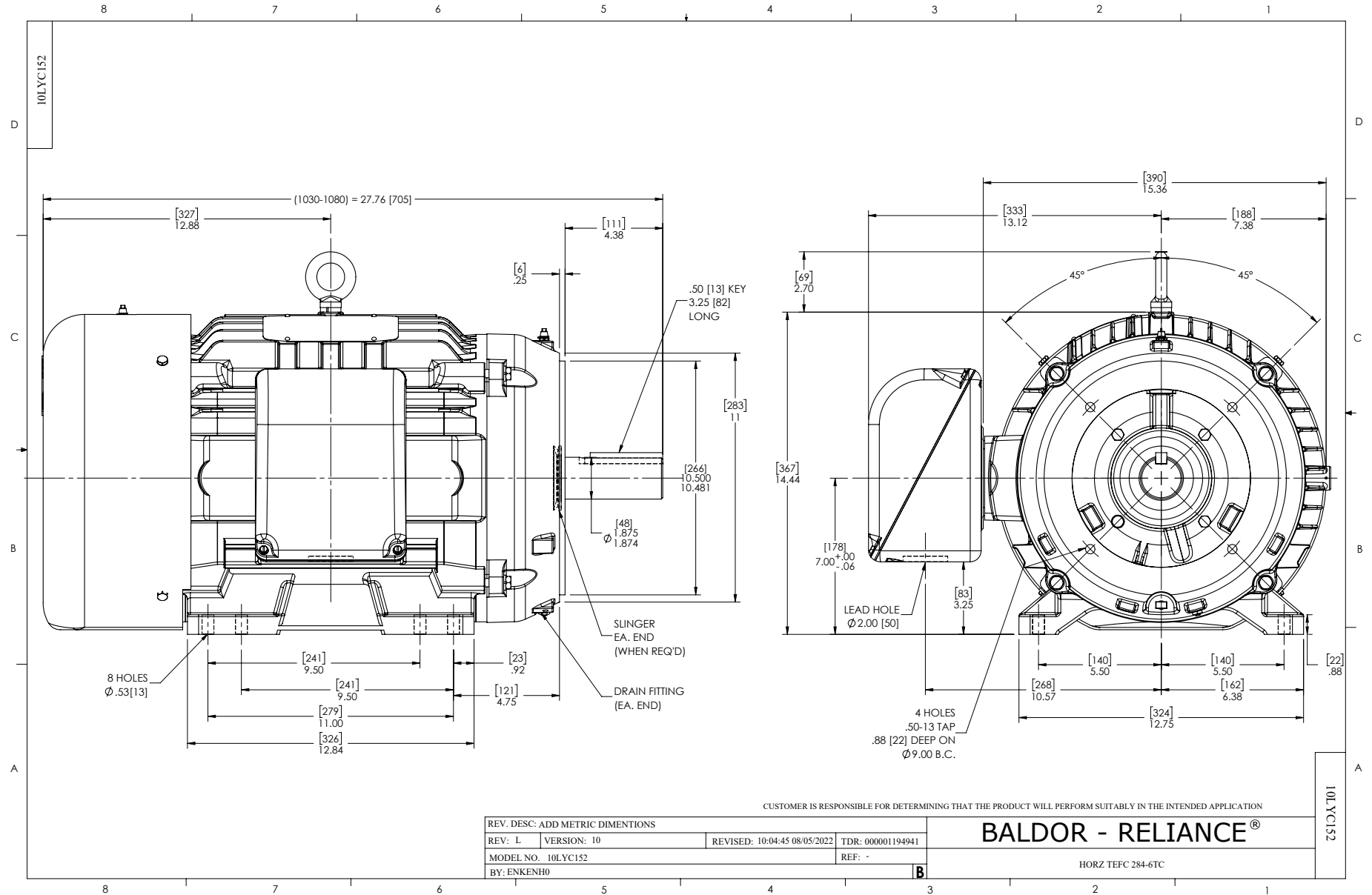
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270



4/4/2025 ACPERF, record # 32189



CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

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3PH, DV, 9 LEADS, DELTA CONNECTION

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