

BALDOR • RELIANCE

Customer information packet

ECTM2334T

20 AIR OVERHP, 1770RPM, 3PH, 60HZ, 256T, 0960

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	256T
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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	48.000 A @ 230.0 V 52.000 A @ 208.0 V 24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	R
Type	AC
Mech. spec.	09L877
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYL877
Eff. date	11-14-2023
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-27-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.00 IN
Power Factor	83
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP2178									
CAT.NO.	ECTM2334T								
SPEC.	09L877T459G1								
HP	20 AIR OVER								
VOLTS	230/460								
AMP	48/24								
RPM	1770								
FRAME	256T		HZ	60		PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	F		
NEMA-NOM-EFF	93	PF	83						
RATING	40C AMB-CONT								
CC									
DE	6309	ODE	6208						
ENCL	TEAO	SN							
	1800 FPM @ 250CFM								

Parts list

Part number	Description	Quantity
SA348225	SA 09L877T459G1	1.000 ea
RA336777	RA 09L877T459G1	1.000 ea
09CB1002A25P	KOBX W/1.25 NPT LEAD HOLE & 2.38 MTG HOL	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HA4044A00	PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09EP1100C58P	FREP W/PRIMER, SPL DRAINS & AIR RELIEF	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
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4600B53	SEAL 1.688 X 2.275 X 0.312 SINGLE LIP DB	1.000 ea
HA7205	"L" SHAPE LIFTING LUG FOR 37,39 & 40 FRA	2.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
09EP1101A162P	SPL PU EP,MODEL 309 - 309 BRG W/EPOXY PR	1.000 ea
10XN3816K24	3/8-16 X 1.50 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
HW4600G53	DOME SLINGER, 5.438 OD X 1.620/1.562 ID	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
12CB1503P	CONDUIT BOX LID, CAST W/EPOXY PRIMER	1.000 ea
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.023 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	3.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	3.000 ea
MG1025G05	WILKOFAST, 789.227, MED. GRAY CHAR. MET.	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP2178	SS CP SUPER-E UL CC	1.000 ea
40PA1005	PACKAGING GROUP, 09 STD	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 70816

Typical performance - not guaranteed values

Winding: 09WGT459-R007			Type: 0960M			Enclosure: TEAO		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)	20 AIR OVER		Full Load Torque	59.27 LB-FT				
Volts	230/460		Start Configuration	direct on line				
Full Load Amps	48/24		Breakdown Torque	232 LB-FT				
R.P.M.	1770		Pull-up Torque	126 LB-FT				
Hz	60	Phase	3	Locked-rotor Torque	141 LB-FT			
NEMA Design Code	A	KVA Code	J	Starting Current	198 A			
Service Factor (S.F.)	1.15		No-load Current	10.4 A				
NEMA Nom. Eff.	93	Power Factor	83	Line-line Res. @ 25°C	0.33814 Ω			
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	58°C				
S.F. Amps			Temp. Rise @ S.F. Load	70°C				
			Locked-rotor Power Factor	26.9				

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

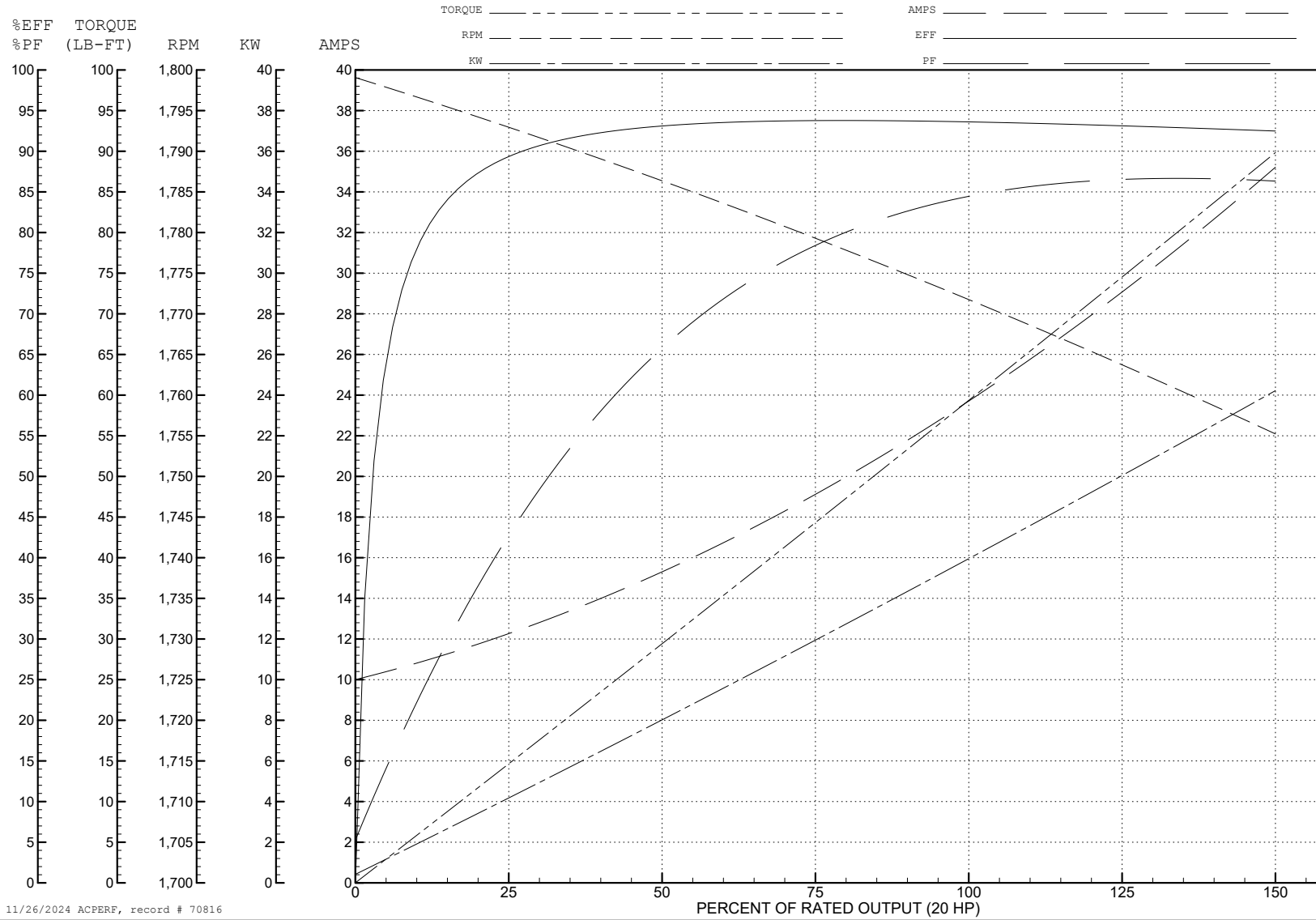
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

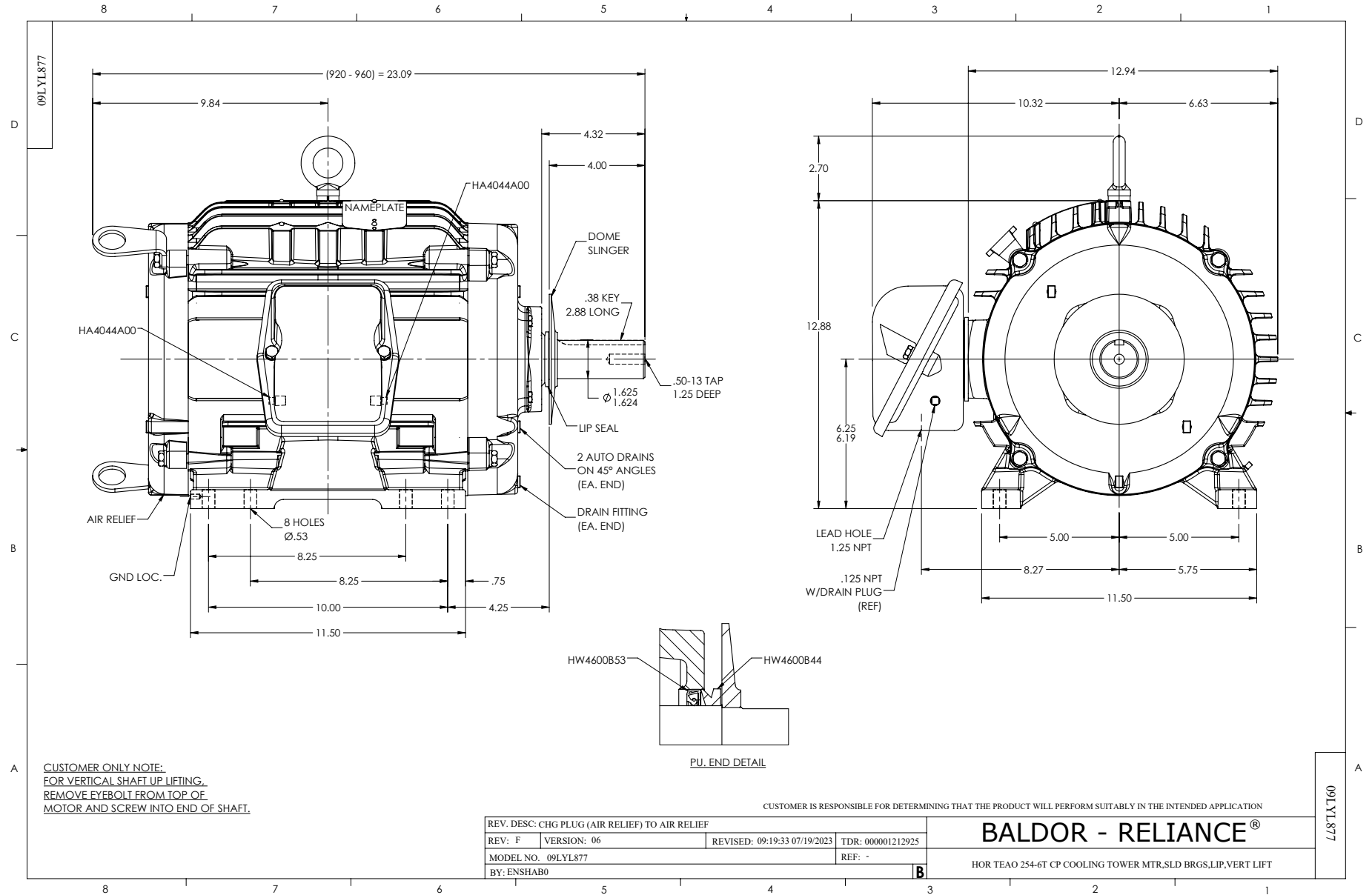
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

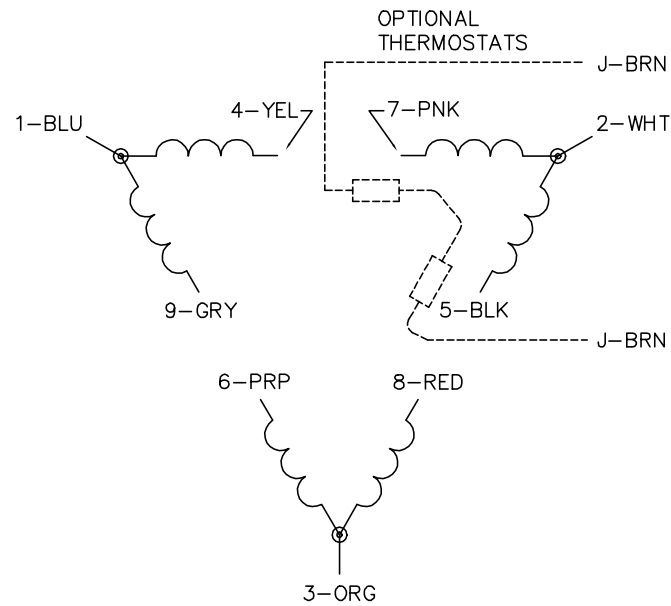
TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198



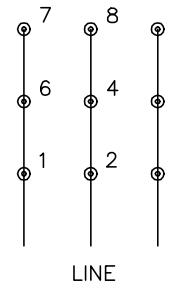
11/26/2024 ACPERF, record # 70816



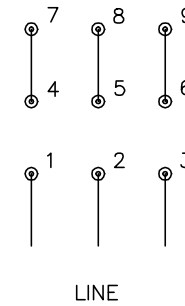
CD0180



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

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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