

BALDOR® • RELIANCE 

Product Information Packet

ECP4112T-4

20HP,880RPM,3PH,60HZ,324T,1256M,TEFC,F1

Part Detail							
Revision:	Y	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY497	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	12F904	Layout:	12LYF904	Poles:	08	Created Date:	09-23-2011
Base:	RG	Eff. Date:	02-16-2022	Leads:	3#10		

Specs			
Catalog Number:	ECP4112T-4	Inverter Code:	Inverter Duty
Enclosure:	TEFC	KVA Code:	G
Frame:	324T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	20.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 10 AWG
Synchronous Speed @ Frequency:	900 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP A,B,C,D	Motor Type:	1256M
XP Division:	Division II	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	69
	CSA EEV	Product Family:	Super-E Chemical Processing
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Constant Torque Speed Range:	6	Shaft Rotation:	Reversible

Current @ Voltage:	30.000 A @ 460.0 V	Shaft Slinger Indicator:	Shaft Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None
Insulation Class:	F	XP Temp Code:	T3

Nameplate NP3241											
CAT.NO.	ECP4112T-4	P/N		ENCLOSURE	TEFC						
SPEC.	12F904Y497	CC	010A	FRAME	324T	S/N					
HP	20	CLASS	F	HZ	60	DES	B				
RPM	880	RPM MAX	1325	PH	3	KVA-CODE	G				
VOLT	460	MOTOR WEIGHT	475								
AMP	30	SER.F.	1.15	PF	69	ODE BRG	6312	DE BRG	6312		
RATING	40C AMB-CONT	NEMA-NOM-EFF	90.2	GREASE	POLYREX EM						
				INV.TYPE	PWM						
TEMP CODE	T3	INVERTER-TEMP-CODE	200								
TEMP =	200	C HP FR	60	C HP TO	90						
CT HZ FROM	6	CT HZ TO	60								
HTR-VOLTS		HTR-AMPS		HTR-WATTS		MAX. SPACE HEATER TEMP.		VT HZ FROM	3	VT HZ TO	60

Parts List		
Part Number	Description	Quantity
SA231208	SA 12F904Y497	1.000 EA
RA218224	RA 12F904Y497	1.000 EA
10FN3001A02	310 FAN, PLASTIC 2.000 DIA. BORE	1.000 EA
10CB1000A203P	KOBX W/2.00 NPT & .31 GND MTG, EPOXY PRI	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	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
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	1.000 EA
HA4017A10	1/8X1.25 GREASE EXT (F/S)	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HA1005A04	SLINGER, OD 3.620, ID 1.98,	1.000 EA
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
12EP1111A30P	SPL PUEP 312 BRG W/EPOXY	1.000 EA
10XN5013K32	1/2-13 X 2.00" HEX HD GRD 5 (20051)	4.000 EA
12FH1002A33P	FAN COVER, MACH ,EPOXY PRIMER	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 EA
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW2501H34	KEY, 1/2 SQ X 4.00	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.033 EA
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
12EP1111A35GP6	FR ENDPLATE, MACH W/EPOXY PRIMER & RELIA	1.000 EA
HA3400A32	STUD, 1/2-13 X 7.38	4.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	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, MOBIL POLYREX EM - 124047	0.200 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA

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HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
HA6390A01	HOSE CLAMP FOR 3.12 DIA S.S. OR PLATED	1.000 EA
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3241	SS SUPER-E INV UL CSA-EEV PREM CC	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA
LB1449	DIV-2/NEC WARNING LABEL	1.000 EA

AC Induction Motor Performance Data

Record # 47242

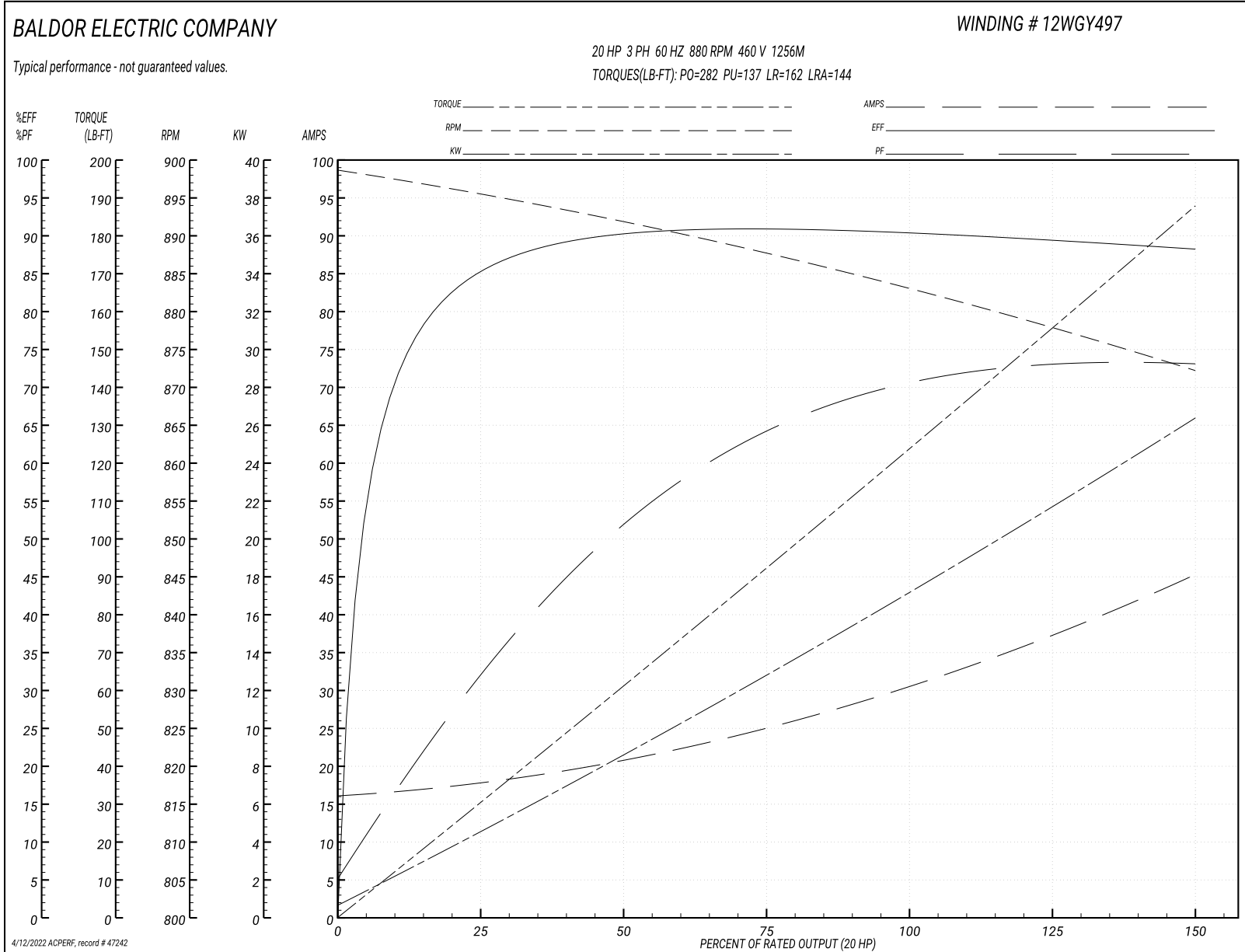
Typical performance - not guaranteed values

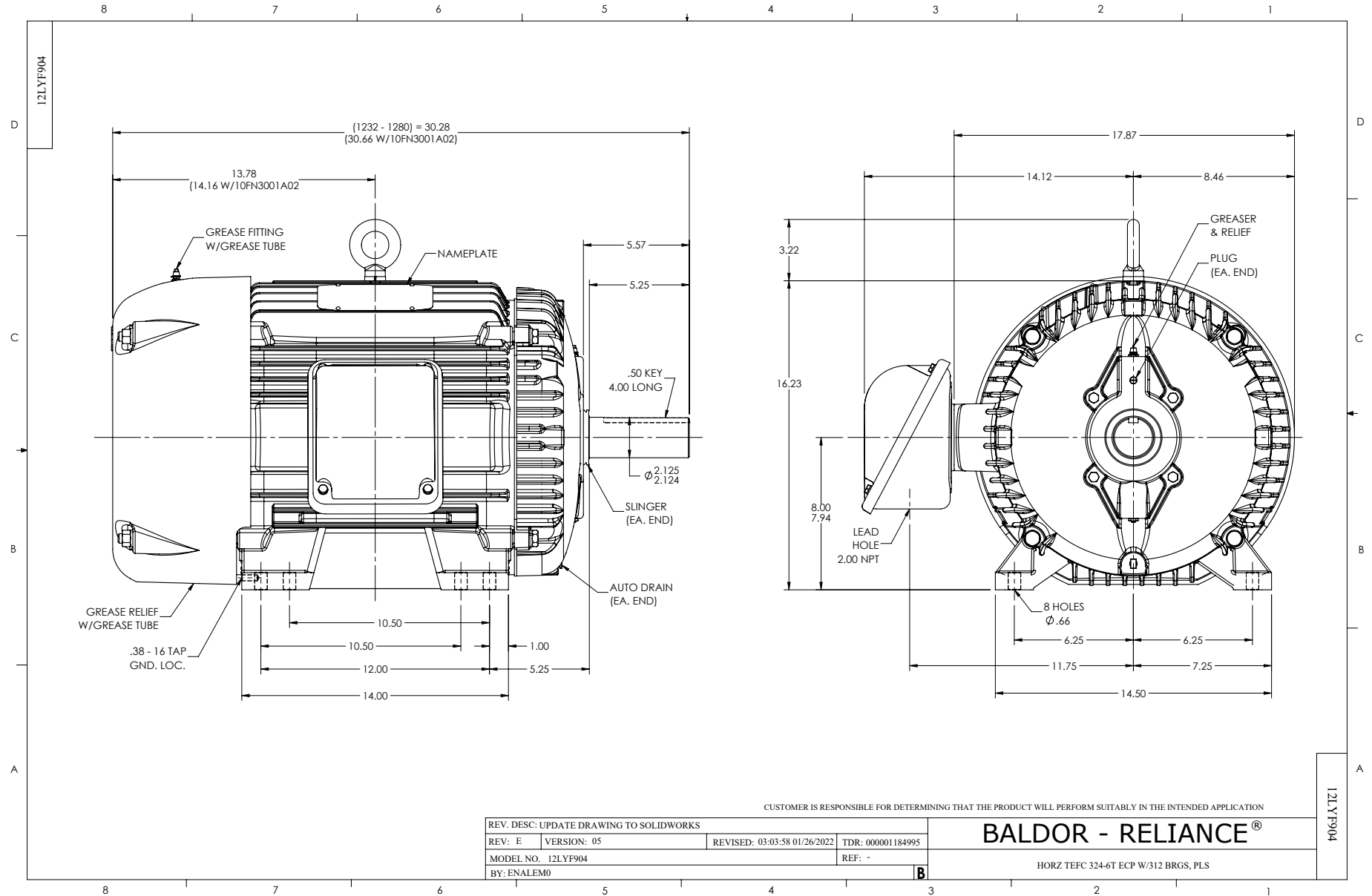
Winding: 12WGY497-R016		Type: 1256M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	20	Full Load Torque	120 LB-FT	
Volts	460	Start Configuration	direct on line	
Full Load Amps	30	Breakdown Torque	282 LB-FT	
R.P.M.	880	Pull-up Torque	137 LB-FT	
Hz	60 Phase	Locked-rotor Torque	162 LB-FT	
NEMA Design Code	B KVA Code	G	Starting Current	144 A
Service Factor (S.F.)	1.15	No-load Current	16.39 A	
NEMA Nom. Eff.	90.2 Power Factor	69	Line-line Res. @ 25°C	0.412 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	53°C	
S.F. Amps		Temp. Rise @ S.F. Load	62°C	
		Locked-rotor Power Factor	33.6	
		Rotor inertia	10.7 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	52	63	70	72	74	71
Efficiency	84.9	89.9	90.8	90.5	89.9	88.1	90.1
Speed	895	892	888	884	879	872	881
Line amperes	17.41	20.54	24.67	29.93	36.18	45.14	33.9

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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