

BALDOR • RELIANCE

Customer information packet

EM2539T-8G

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	324T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA EEV UR CSA
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	109.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	109.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H

Part detail

Revision	L
Type	AC
Mech. spec.	40E245
Base	
Status	PRD/A
Elec. spec.	40WGX238
Layout	40LYE245
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	04
Leads	6#4
Proprietary	False
Created date	09-11-2013

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 4 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 IN
Power Factor	84
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554L

CAT.NO.	EM2539T-8G		P/N			ENCL	OPSB
SPEC.	40E245X238G1	CC	010A	FRAME	324T	SER.NO.	
HP	40	CLASS	H	HZ	60		
RPM	1770	PH	3	DES	A		
VOLTS	200	CODE	H	ODE BRG	6309	DE BRG	6312
AMPS	109						
RATING	40C AMB-CONT	NEMA-NOM-EFF	94.1	GREASE	POLYREX EM		
PF	84	SER.F.	1.15	VPWM INVERTER READY			
HTR-VOLTS	HTR-AMPS		MAX. SPACE HEATER TEMP.				

Parts list

Part number	Description	Quantity
SA269034	SA 40E245X238G1	1.000 ea
RA255688	RA 40E245X238G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 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
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3201A04	PUEP, MACH - OPEN - FOR 312 BRG W/RET. R	1.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 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
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA3159A08	THRUBOLT- .38-16 X 20.00 LONG STUD	4.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.030 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea

40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
LC0695	CONNECTION LABEL	1.000 ea
NP3554L	SS SUPER-E,CURUS-EEV,NEMA PREM,CC,300 SR	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

AC Induction Motor Performance Data

Record # 50232

Typical performance - not guaranteed values

Winding: 40WGX238-R002		Type: 4064M	Enclosure: OPSB
Nameplate Data		200 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	40	Full Load Torque	119 LB-FT
Volts	200	Start Configuration	direct on line
Full Load Amps	109	Breakdown Torque	415 LB-FT
R.P.M.	1770	Pull-up Torque	181 LB-FT
Hz	60 Phase	Locked-rotor Torque	238 LB-FT
NEMA Design Code	A KVA Code	Starting Current	734 A
Service Factor (S.F.)	1.15	No-load Current	45.2 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.03 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	41°C
S.F. Amps		Temp. Rise @ S.F. Load	49°C
		Locked-rotor Power Factor	32
		Rotor inertia	5.09 LB-FT ²

Load Characteristics 200 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	68	78	84	86	86	85
Efficiency	92.9	94.6	94.9	94.4	93.6	93	94
Speed	1792	1785	1777	1770	1761	1752	1765
Line amperes	52.1	67.5	87.3	109	134	162	124

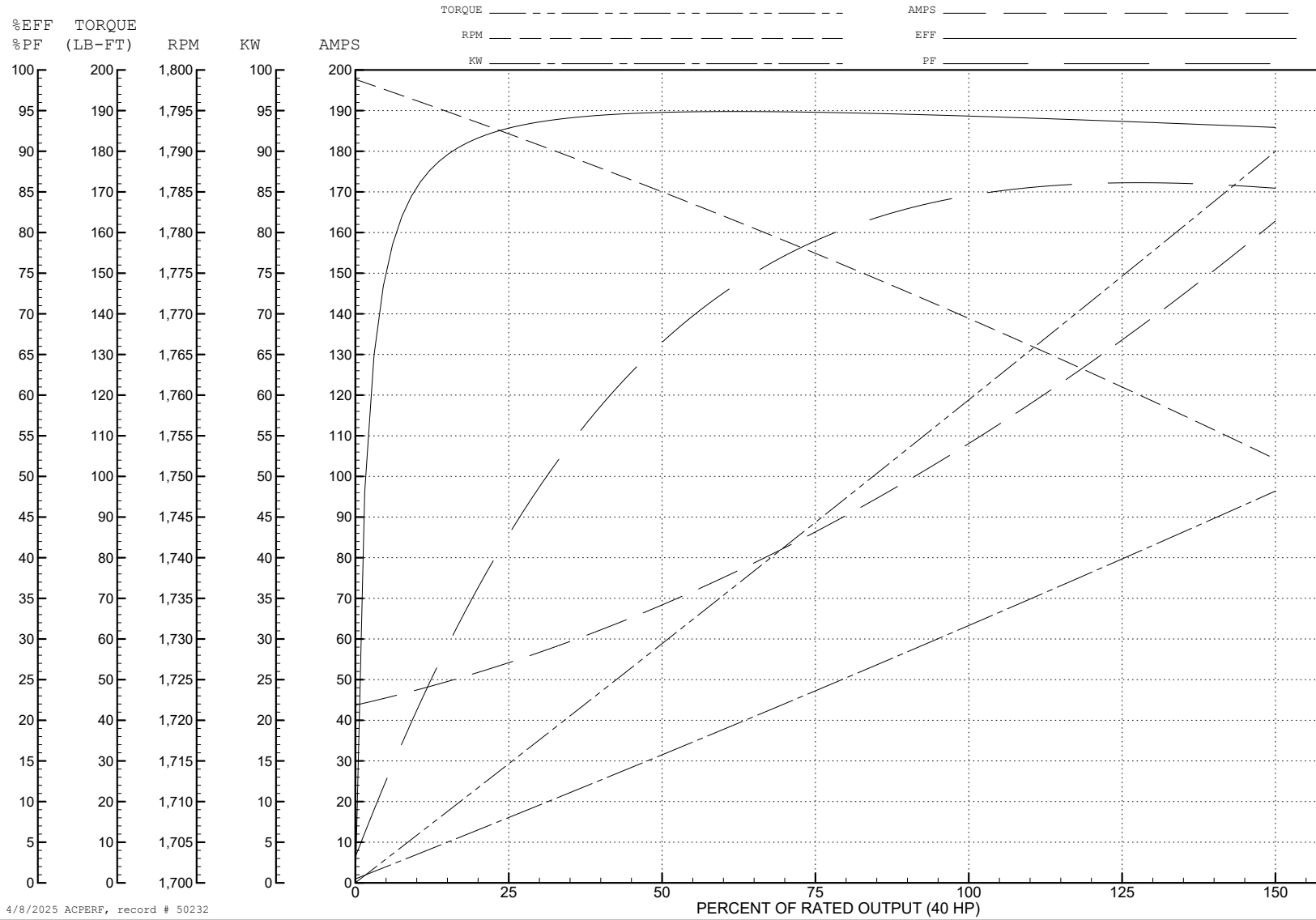
ABB Motors and Mechanical Inc.

WINDING # 40WGx238

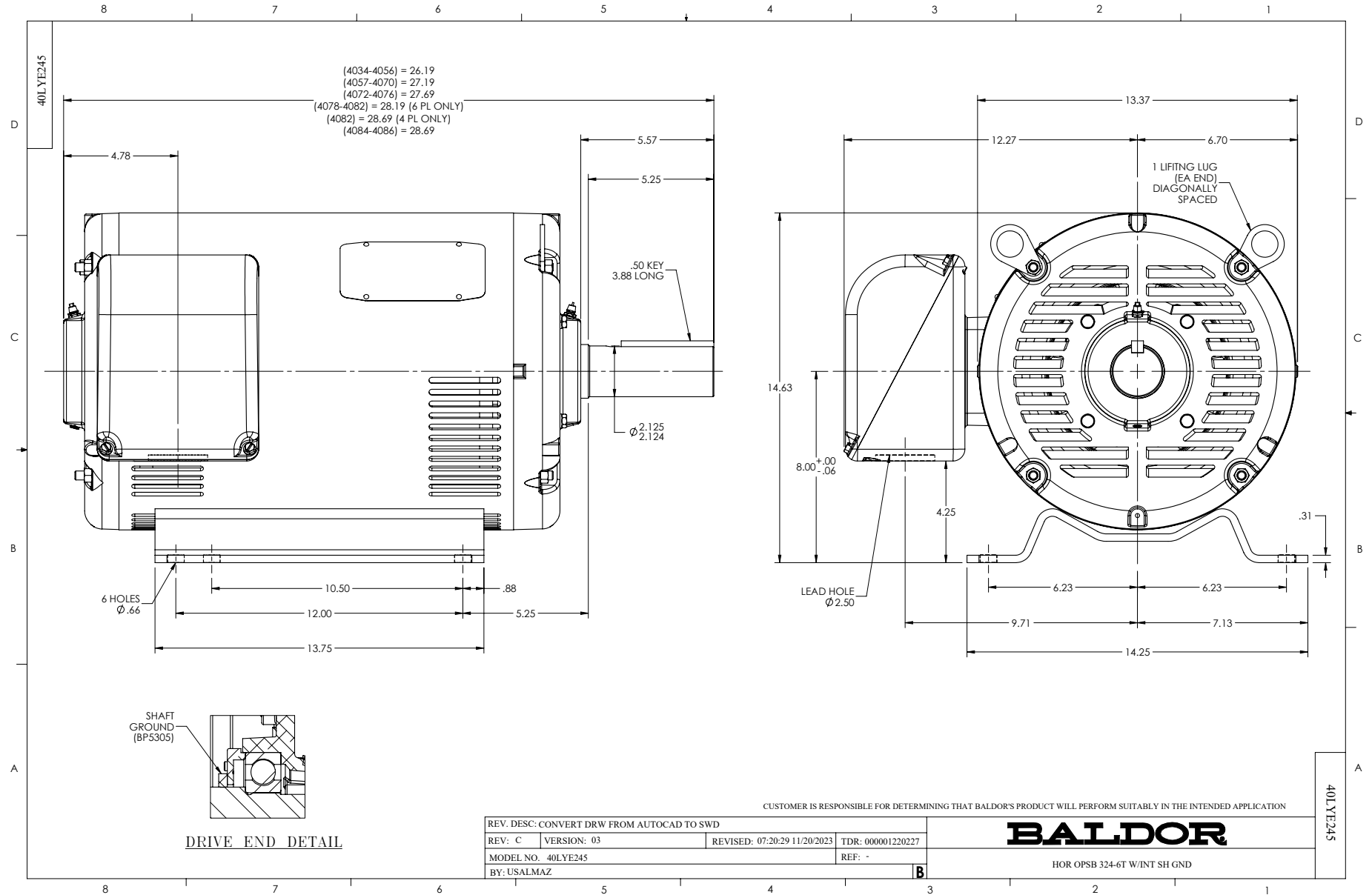
40 HP 3 PH 60 HZ 1770 RPM 200 V 4064M

Typical performance - not guaranteed values.

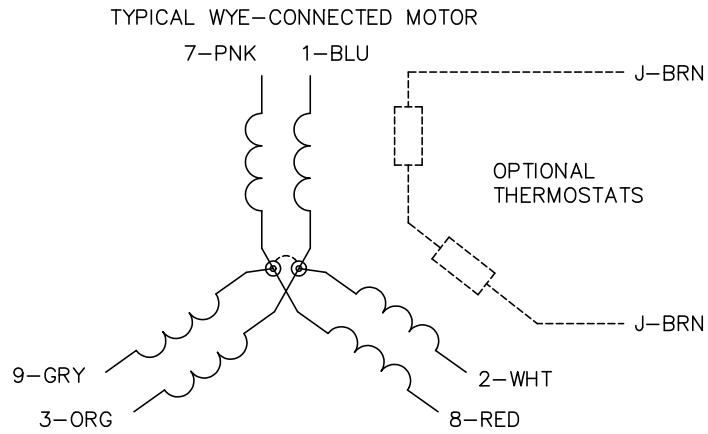
TORQUES (LB-FT): PO=415 PU=181 LR=238 LRA=734



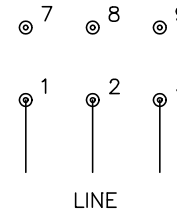
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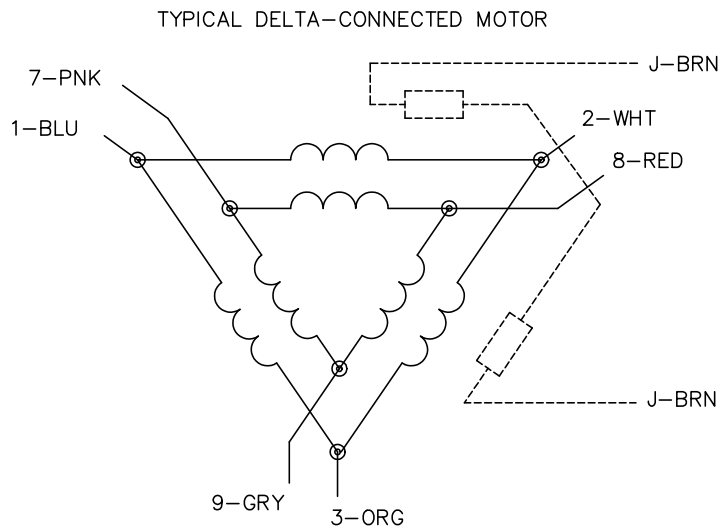
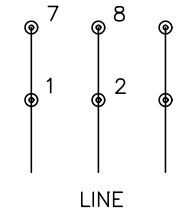
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE 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 ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
S69000		FILE: AAA00005151	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

CD0695