

ABB BALDOR RELIANCE III

Customer information packet

VEBM3554T-5D

1.5/1.1KWHP, 1770RPM, 3PH, 60HZ, 145TC, 3524M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CE WEEE UKCA NEMA PREMIUM CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.700 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a

Part Detail

Revision	D
Type	AC
Mech. spec.	35X050
Base	
Status	PRD/A
Elec. spec.	35WGG122
Layout	35LYX050
Eff. date	04-16-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F3
Number of Poles	4
Overall Length	17.19 IN
Power Factor	77
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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

NP2934L									
CAT.NO.	VEBM3554T-5D								
SPEC.	35X050G122G1								
HP	1.5/1.1KW								
VOLTS	575								
AMP	1.7								
R.P.M. (1/MIN)	1770								
FRAME	145TC		HZ	60		PH	3		
SER.F.	1.15		CODE	M		DES	B	CL	F
NEMA-NOM-EFF	86.5		PF	74					
RATING	40C AMB-S1 CONT								
CC	010A								
DE	6205		ODE	6205					
ENCL	TEFC		SN						
	SFA 1.9								

Parts List

Part number	Description	Quantity
SA409222	SA 35X050G122G1	1.000 ea
RA400767	RA 35X050G122G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
S/P111-000-002	CORONA TEST, SUPER E MOTORS - FT. SMITH	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB4007	KOBX,W/PRIMER (WAS REL# 79097-49-C)	1.000 ea
35GS3023	GASKET FOR KOBX 35CB4007, CLSD CELL NEOP	1.000 ea
WD4101A13	STEEL CAPLUG,BP-1 1/8, PLUG D3561S	2.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
11XT1032G04	10-32 X 1/4" GRD SCREW	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP3119A01	SPL FREP TEFC 205 BRG	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FH3004A01	FAN COVER ASSY, BRAKE MTG	1.000 ea
51XN1032A32	10-32 X 2 HX WS SL SR	4.000 ea
BR2006B01	DBSC SPLINED HUB 5/8 BOR	1.000 ea
35FN3003A01	EXFN, PLASTIC, 5.88 OD, .626 ID	1.000 ea
35CB4519	CB LID W/BLACK PRIMER	1.000 ea
35GS3019A01	LEXIDE GASKET, FOR KOBX LID 35CB4519	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
WD4006A01	WIRE JOINT,T&B RB-4 OR RB-44	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1419	CONNECTION LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 ga
HA3100A13	THRUBOLT 10-32 X 7.750	4.000 ea
46BK0304C01	DBSC-VP-10-MA-287/575 VAC	1.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP2934L	ALUM SUPER-E UL CE UKCA WEEE CC PREM	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 87553

Typical performance - not guaranteed values

Winding: 35WGG122-R001			Type: 3524M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5	Full Load Torque		4.46 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		1.7	Breakdown Torque		17.4 LB-FT	
R.P.M.		1770	Pull-up Torque		9.2 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		11.3 LB-FT
NEMA Design Code		B	KVA Code	L	Starting Current	
Service Factor (S.F.)		1.15	No-load Current		1 A	
NEMA Nom. Eff.		86.5	Power Factor	77	Line-line Res. @ 25°C	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		1.9	Temp. Rise @ S.F. Load		49°C	
			Locked-rotor Power Factor		58.3	
			Rotor inertia		0.173 lb-ft²	

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	56	69	77	82	85	81
Efficiency	76.7	84.6	86.5	86.7	85.9	84.7	86.1
Speed	1792	1786	1779	1770	1762	1753	1762
Line amperes	1.06	1.2	1.42	1.7	2.01	2.36	1.85

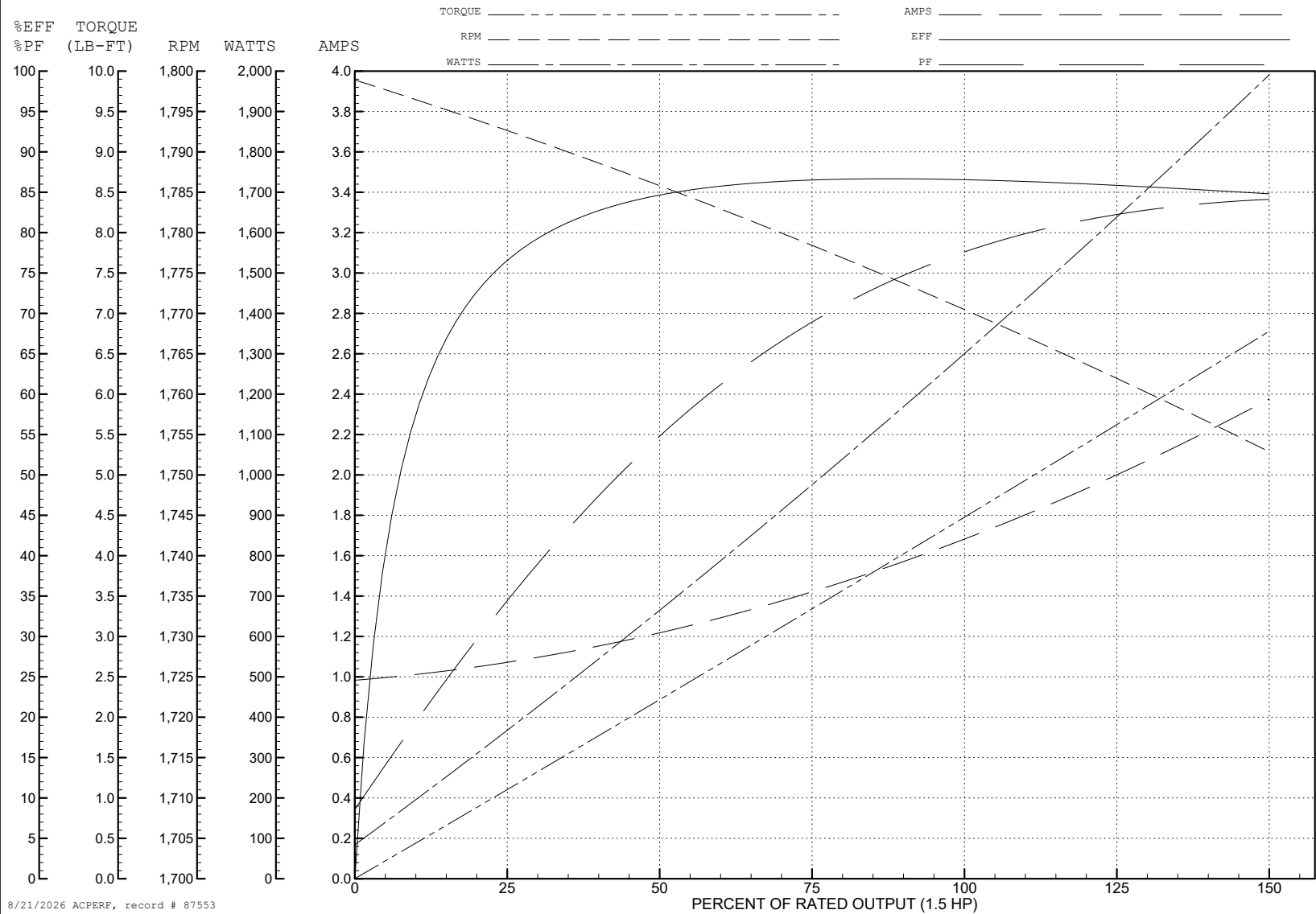
ABB Motors and Mechanical Inc.

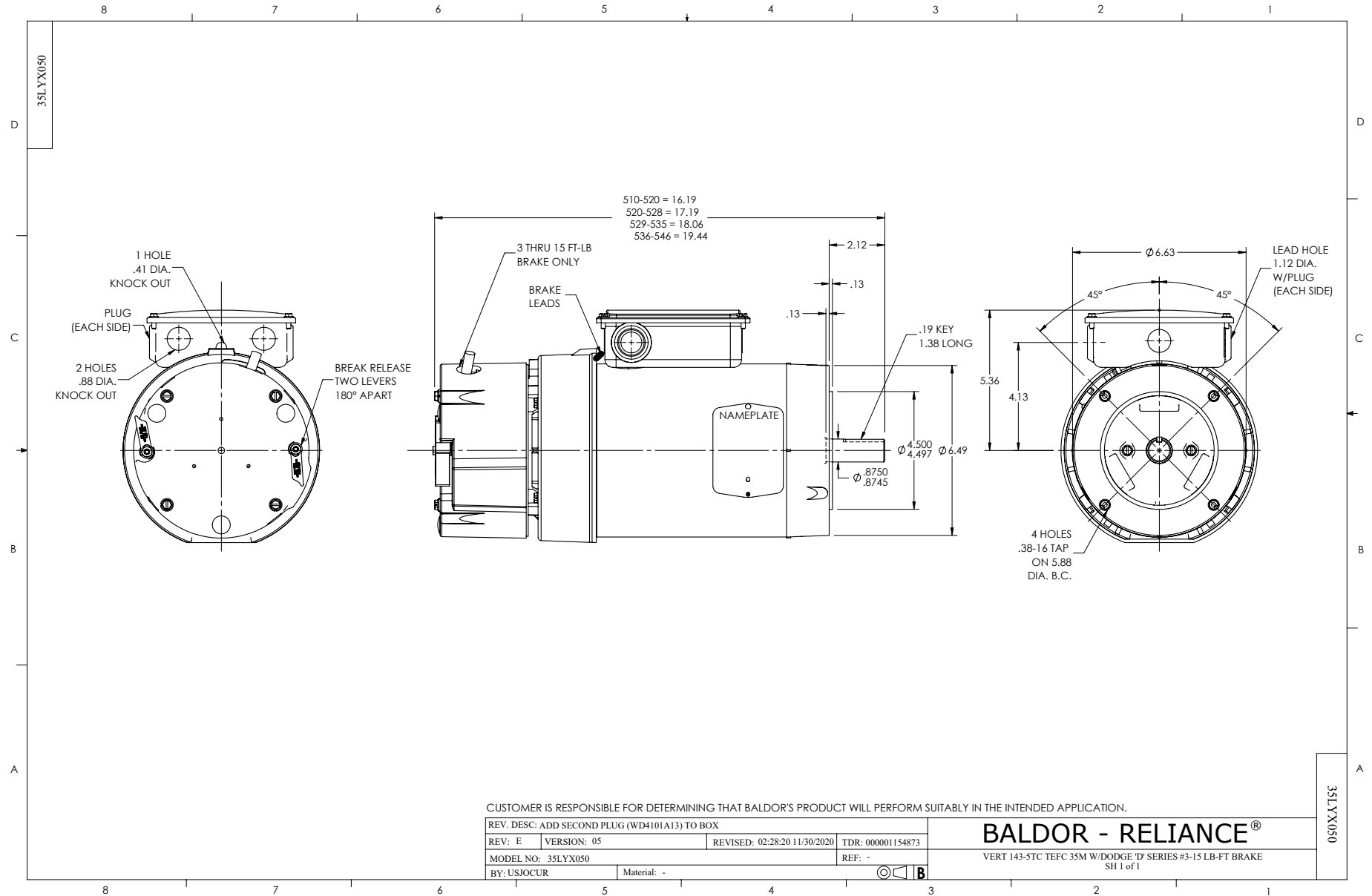
WINDING # 35WGG122

Typical performance - not guaranteed values.

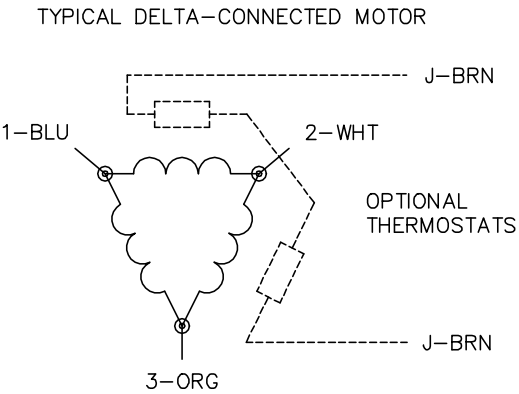
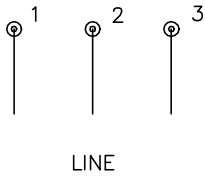
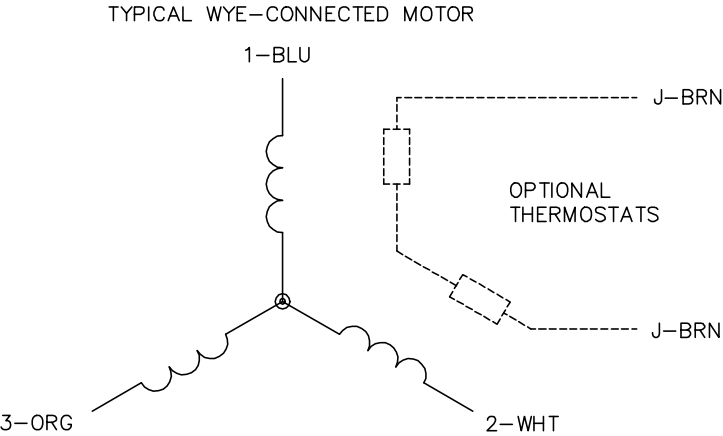
1.5 HP 3 PH 60 HZ 1770 RPM 575 V 3524M

TORQUES (LB-FT): PO=17.4 PU=9.2 LR=11.3 LRA=14.8





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

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10: 24: 49 02/19/2019	BY: ENBRIRO
MTL: —		

BALDOR - RELIANCE®

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

SH 1 of 1

CD2120

WIRING CONNECTIONS (1 PHASE VAC)

	POWER LINE A	POWER LINE B	CAP TOGETHER	CAP ALONE
AC LOW VOLT.	B1	B2	B3 & B5	B4
AC HIGH VOLT.	B1 & B5	B2	---	B3 CAP ALONE B4 CAP ALONE
DC VOLT.	B1	B2	B3 & B5	B4

B1 WHITE
 B2 BLACK
 B3 GRAY
 B4 BLUE
 B5 RED

CD2120

REV. DESC: NEW			BALDOR • DODGE • RELIANCE III	
REV. LTR: -	VERSION: 00	TDR: 000000741785		
FILE: \CKA\00037\282		REVISED: 12: 28: 11 04/12/2012	D-SERIES MOTOR BRAKE 5LD AC\DC	
MTL: -		BY: CKRONSO	SH 1 of 1	