

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **EM4400TS**

**100HP, 1775RPM, 3PH, 60HZ, 405TS, TEFC**

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Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	A40064M	Elec. Spec:	A40WG0681	CD Diagram:	
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:		Layout:	
Frame:	405TS	Mounting:	F1	Poles:	04	Created Date:	12-17-2010
Base:		Rotation:	R	Insulation:	B	Eff. Date:	06-20-2012
Leads:	3#2,6#4	Literature:		Elec. Diagram:		Replaced By:	

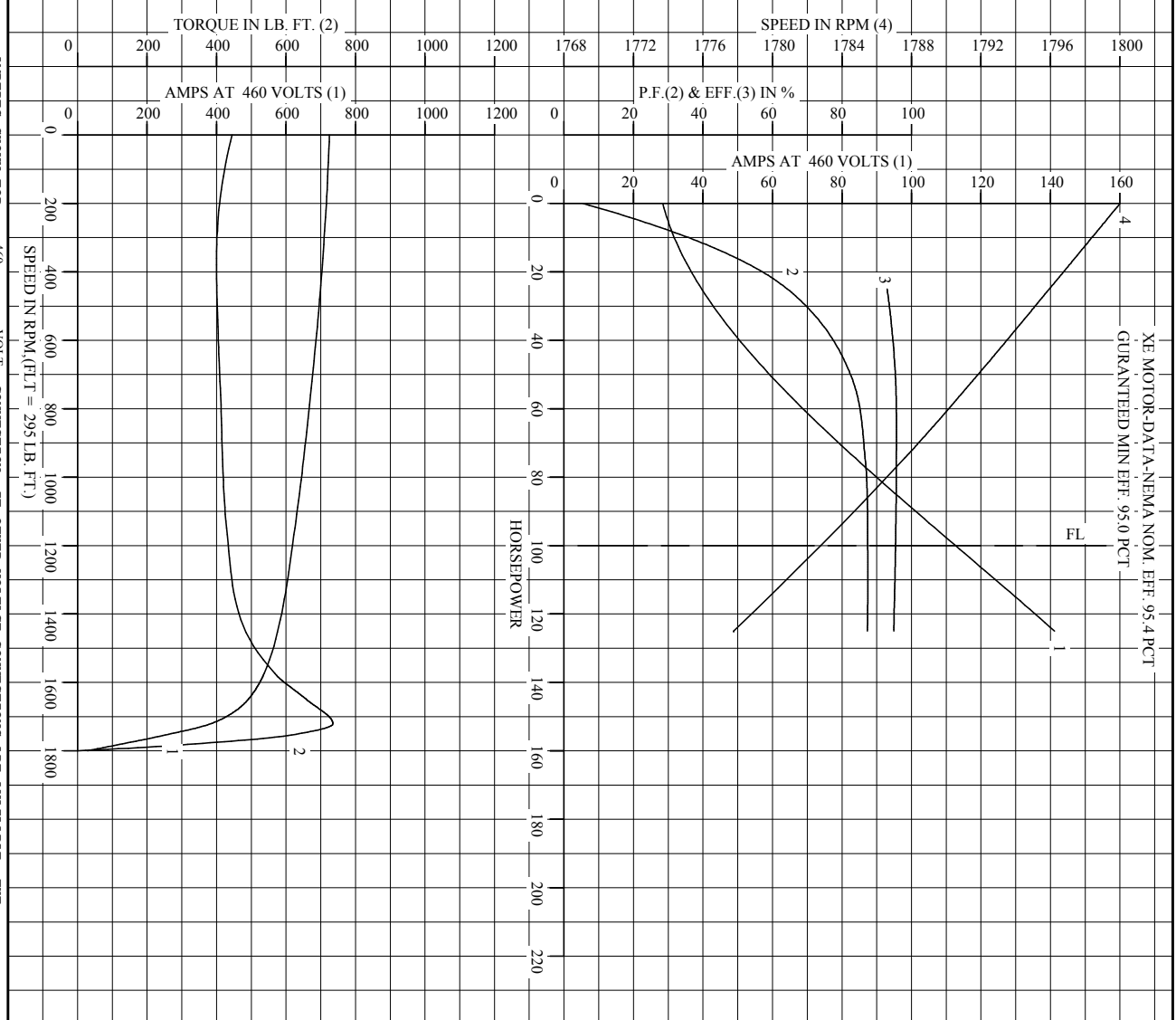
Nameplate NP2383L									
CAT.NO.	EM4400TS	SPEC NO.	P40G4565						
HP	100	AMPS	224/112	VOLTS	230/460	DESIGN	B		
FRAME	405TS	RPM	1785	HZ	60	AMB	40	SF	1.15
DRIVE END BEARING	80BC03J30X	PHASE	3	DUTY	CONT	INSUL.CLASS	F		
OPP D.E. BEARING	80BC03J30X	TYPE	P	ENCL	TEFC	CODE	G		
SER.NO.		POWER FACTOR	87	NEMA-NOM-EFFICIENCY	95.4				
		MAX CORR KVAR	18.0	GUARANTEED EFFICIENCY	95.0				
NEMA NOM/CSA QUOTED EFF									
		MOTOR WEIGHT							

Parts List		
Part Number	Description	Quantity
SA213611	SA P40G4565	1.000 EA
RA200830	RA P40G4565	1.000 EA
421948032	LABEL, MYLAR	1.000 EA
613-6PU	N/P (RELEASE QTY 10,000)	1.000 EA
000692000VD	N/P (REL QTY 4000)	1.000 EA
NP2383L	SUPER-E ,SS, CC, CSA-C US, CSA EEV	1.000 EA
089412051B	BRKT 400 089412051WCD KB	1.000 EA
415072001B	CLAMP	1.000 EA
083198006A	FANCV-PLASTIC400 KB@45	1.000 EA
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 EA
078548001R	FAN KB 234/150 (84) 400	1.000 EA
004824015A	GREASE POLYREX EM	0.880 LB
032018016EK	HHCS 5/8-11X2 PLATED	4.000 EA
032018010CK	HHCS 3/8-16X1-1/4 PLTD.	4.000 EA
032018030CK	HHCS 3/8-16X3-3/4 PLATED	3.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
410700000DA	WAVY SPRING WASHER (400)	1.000 EA
035000001G	GITS GRS CUP,ODE	1.000 EA
034000014AB	WSH ID.406 OD.812 TH.065	4.000 EA
034530060AB	P/NIP 1/8X7-1/2 GALV.	1.000 EA
034690001AB	SQHDPLG, COND	1.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA
034690001AB	SQHDPLG, COND	1.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
089412051A	BRKT 400 089412051WCD KB	1.000 EA
032018016EK	HHCS 5/8-11X2 PLATED	4.000 EA
032018030CK	HHCS 3/8-16X3-3/4 PLATED	3.000 EA
035000001G	GITS GRS CUP,ODE	1.000 EA
077176000L	C/BOX, PAINTED 360-400	1.000 EA
077176001A	CBOXC, PAINTED 360-400	1.000 EA
043292000AJ	GASK 320-400	1.000 EA
402731001A	GASK 360-440	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
MG1000Y03	WILKO 689.710 GOLD PAINT SUPER E	0.250 GA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 EA
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
415000003D	T/LUG 897-777 KPA25/G16	1.000 EA
406099000A	PLUG - FAN COVER 320-440	1.000 EA
033512004LB	HHTTS 1/4-20X1/2 PLTD.	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
034180022GA	KEY 1/2X1/2X2-3/4 L	1.000 EA
LB1346	LABEL,SUPER-E GP(4X4)	1.000 EA
PK5004A02	WOOD BASE 40X32 STACK 2X4 RUNNER	1.000 EA

Accessories		
Part Number	Description	Multiplier
K40G2	C-FACE KIT FR400T 4/6/8POLE ONLY	A8
089412054B	D-FLANGE BRKT 400 089416055WCB	P1

REL. S.O. \_\_\_\_\_ RPM 1785 S.F. 1.15 ROTOR 418142-33-RE  
 FRAME 405T VOLTS 230/460 NEMA DESIGN B TEST S.O. TYPICAL DATA  
 HP 100 AMPS 224/112 CODE LETTER G TEST DATE ---  
 TYPE P DUTY CONT ENCLOSURE FCXE STATOR RES. @ 25 °C .0123/ .0492  
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 596830 OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY P.B. GREENE  
 CK. BY K.W. KANOUE  
 APP. BY K.W. KANOUE  
 DATE 09/21/93

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
 A40W/G0681-R001  
 ISSUE DATE 09/21/93

Printed on 12/28/10 8:48 @ ragsun

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	405T	100	P	3/60	1785	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
224/112	CONT	40/F	1.15	B	G	FOXE
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
596830	418142-33-RE	---	---	.0123/.0492		

PERFORMANCE

LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	28.6	1800	5.49	0
1/4	25.0	39.2	1796	64.3	93.0
2/4	50.0	59.5	1792	82.5	95.4
3/4	75.0	84.6	1788	86.7	95.7
4/4	100	112	1783	87.4	95.4
5/4	125	141	1778	87.3	94.9

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	151	445	725
PULL UP	360	136	400	706
BREAKDOWN	1721	250	735	382
FULL LOAD	1783	100	295	112

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: TYPICAL DATA  
 XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT  
 GURANTEED MIN EFF. 95.0 PCT

<b>BALDOR</b>	DR. BY P.B. GREENE	<b>A-C MOTOR</b>
	CK. BY K.W. KANOUFF	
	APP. BY K.W. KANOUFF	<b>PERFORMANCE DATA</b>
	DATE 09/21/93	ISSUE DATE 09/21/93

611740-001-SH1

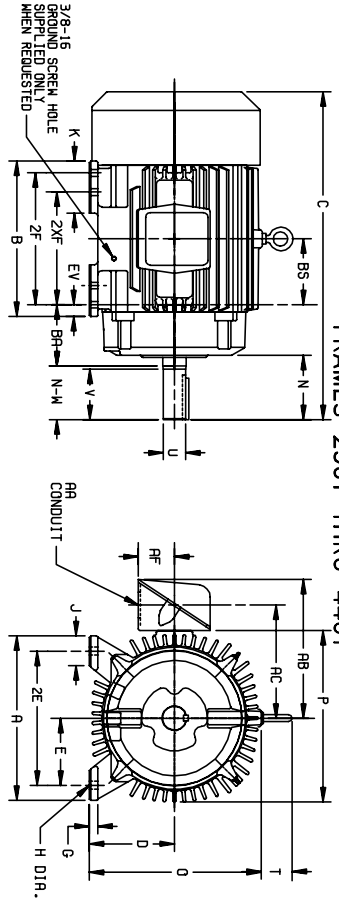
# DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED  
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES 250T THRU 440T



DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

FRAME	A	D(2)	E	G	H	J	K	O	P	T	STEEL TERMINAL BOX				WEIGHT	
SIZE	C	BS	B	2F	N	N-W(6)	U(3)	V	SQ.	LGTH.	BA	EV	BA	EV	(5)	
254T-256T	12.50	6.25	5.00	7.5	1.56	2.50	---	1.325	1.325	2.44	1-1/4	10.25	8.75	2.50	4.25	1.00
264T-266T	13.75	7.00	5.60	10.00	---	---	---	1.475	1.488	2.44	1-1/2	12.25	10.00	3.19	4.75	1.00
284T	17.44	8.00	6.25	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
294T	21.44	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
304T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
324T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
344T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
364T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
384T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
404T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
424T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
444T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
464T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
484T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
504T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
524T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
544T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
564T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
584T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
604T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
624T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
644T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
664T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
684T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
704T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
724T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
744T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
764T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
784T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
804T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
824T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
844T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
864T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
884T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
904T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
924T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
944T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
964T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
984T	26.06	9.00	7.00	8.8	1.89	2.75	4.50	1.639	1.650	2.44	2	15.19	11.44	4.25	5.25	1.38
445TS	40.88	8.25	19.00	16.50	---	---	---	5.19	4.75	3.75	4.50	6.25	3.00	17.14	---	

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
  - (2) "P" VARIES  $\begin{cases} \text{---} & \text{---} \\ \text{---} & \text{---} \end{cases}$  250T - 320T +.00, -.03  
 $\begin{cases} \text{---} & \text{---} \\ \text{---} & \text{---} \end{cases}$  360T - 440T +.00, -.06.
  - (3) "U" VARIES  $\begin{cases} \text{---} & \text{---} \\ \text{---} & \text{---} \end{cases}$  UP TO 1.625 DIA. +.0000, -.0005  
 $\begin{cases} \text{---} & \text{---} \\ \text{---} & \text{---} \end{cases}$  UP TO 1.625 AND LARGER +.000, -.001.
  - (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
  - (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
  - (6) "N-W" VARIES +.00, -.25.
- CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2W-1, W-4W-5W-7, OR C-1 MOUNTING IS SPECIFIED.
- IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .002 TIR. UP TO AND INCLUDING 1.625 DIA. AND .003 TIR. 1.625 DIA. TO 5 INCH DIA.

FRAME \_\_\_\_\_ TYPE \_\_\_\_\_ CERTIFIED FOR \_\_\_\_\_  
 ORDER \_\_\_\_\_ ITEM \_\_\_\_\_ HP \_\_\_\_\_ RPM \_\_\_\_\_ PH \_\_\_\_\_ HZ \_\_\_\_\_ VOLTS \_\_\_\_\_  
 RELIANCE SALES ORDER \_\_\_\_\_ APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE TITLE SHEET 2	VERSION: 02	TDR: 000000498266
REV. LTR: B		
FILE: \RAG\00000\167		REVISED: 07:05:46 04/29/2009
MTL: -		BY: RAGEC

## Baldor • Dodge • Reliance

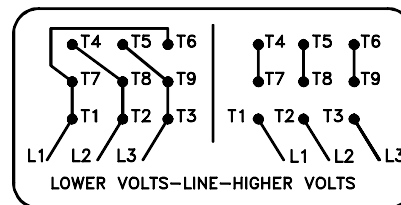
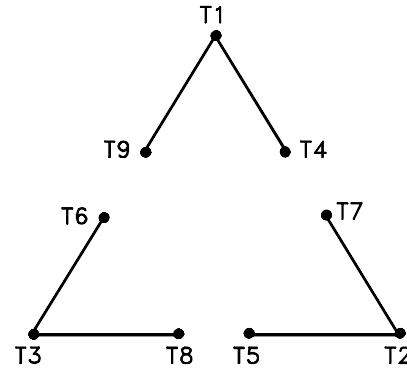
DIM SHEET 250T THRU 440T  
SH 1 of 1

611740-001-SH1



416820-002

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

416820-002

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\661	REVISED: 10: 47: 51 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1