ABB BALDOR RELIANCE

Customer information packet

EHM2539T-8

40HP, 1775RPM, 3PH, 60HZ, 324T, 4250M, OPSB, F1

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/3/2026 5:17:01 AM

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
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	108.000 A @ 200.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	108.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing

Part Detail

Revision	W
Type	AC
Mech. spec.	42H068
Base	
Status	PRD/A
Elec. spec.	42WGW530
Layout	42LYH068
Eff. date	07-10-2024
CD Diagram	CD0006
Poles	04
Leads	3#4
Proprietary	False
Created date	10-07-2010

Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4250M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.69 IN
Power Factor	85
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	Mounting Provisions Only
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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

NP2094E06B03									
CAT.NO.	EHM2539T-8								
SPEC.	42H068W530G1								
HP	40								
VOLTS	200								
AMPS	108								
RPM	1775								
FRAME	324T	**HZ**	60	**PH**	3				
SER.F.	1.15	**CODE**	F	**DES**	B	**CL**	F		
NEMA-NOM-EFF	94.1	**PF**	85						
RATING	40C AMB-CONT								
CC	010A	**USABLE AT 208V**		N/A					
DE	6312	**ODE**	6311						
AUTO		**MANUAL**		**NONE**					
ENCL	OPSB	**SN**							
BLANK									

Parts List

Part number	Description	Quantity
SA204668	SA 42H068W530G1	1.000 ea
RA191912	RA 42H068W530G1	1.000 ea
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 ea
42CB4000A01	CONDUIT BOX 40, STAMPED	1.000 ea
51XF2520A08	SCREW,1/4-20X1/2 TAPTITE-II OR ROLOC 91	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
418199008A	N/P GRD I/D	1.000 ea
42EP3200A01	FR ENDPLATE, MACH	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
42EP3200B13	PUEP, MACH FOR 1/2 SH GND MTG	1.000 ea
84XN0632J08	#6-32 X .50 SOCK HD, BK OX	2.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
42CB4500A01	CONDUIT BOX LID 42, STAMPED, W/ PRIMER	1.000 ea
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	2.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	3.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.080 ga
HA3151A02	THRUBOLT STUD 1/2-13 X 19.25	4.000 ea
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

AC Induction Motor Performance Data
Record # 13728
Typical performance - not guaranteed values

Winding: 42WGW530-R001	**Type:** 4250M	**Enclosure:** OPSB

Nameplate Data				**200 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			40	**Full Load Torque**	118 LB-FT
Volts			200	**Start Configuration**	direct on line
Full Load Amps			108	**Breakdown Torque**	304 LB-FT
R.P.M.			1775	**Pull-up Torque**	152 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	209 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	615 A
Service Factor (S.F.)			1.15	**No-load Current**	31.5 A
NEMA Nom. Eff.	94.1	**Power Factor**	85	**Line-line Res. @ 25ºC**	0.0333 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	27°C
S.F. Amps				**Temp. Rise @ S.F. Load**	33°C
				Locked-rotor Power Factor	27
				Rotor inertia	6.66 LB-FT2

Load Characteristics 200 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	55	76	85	84	87	86	86
Efficiency	90.3	93.6	92.4	94.3	93.8	93	94
Speed	1794	1787	1781	1774	1766	1756	1769
Line amperes	44	61	82	108	131	159	121.8

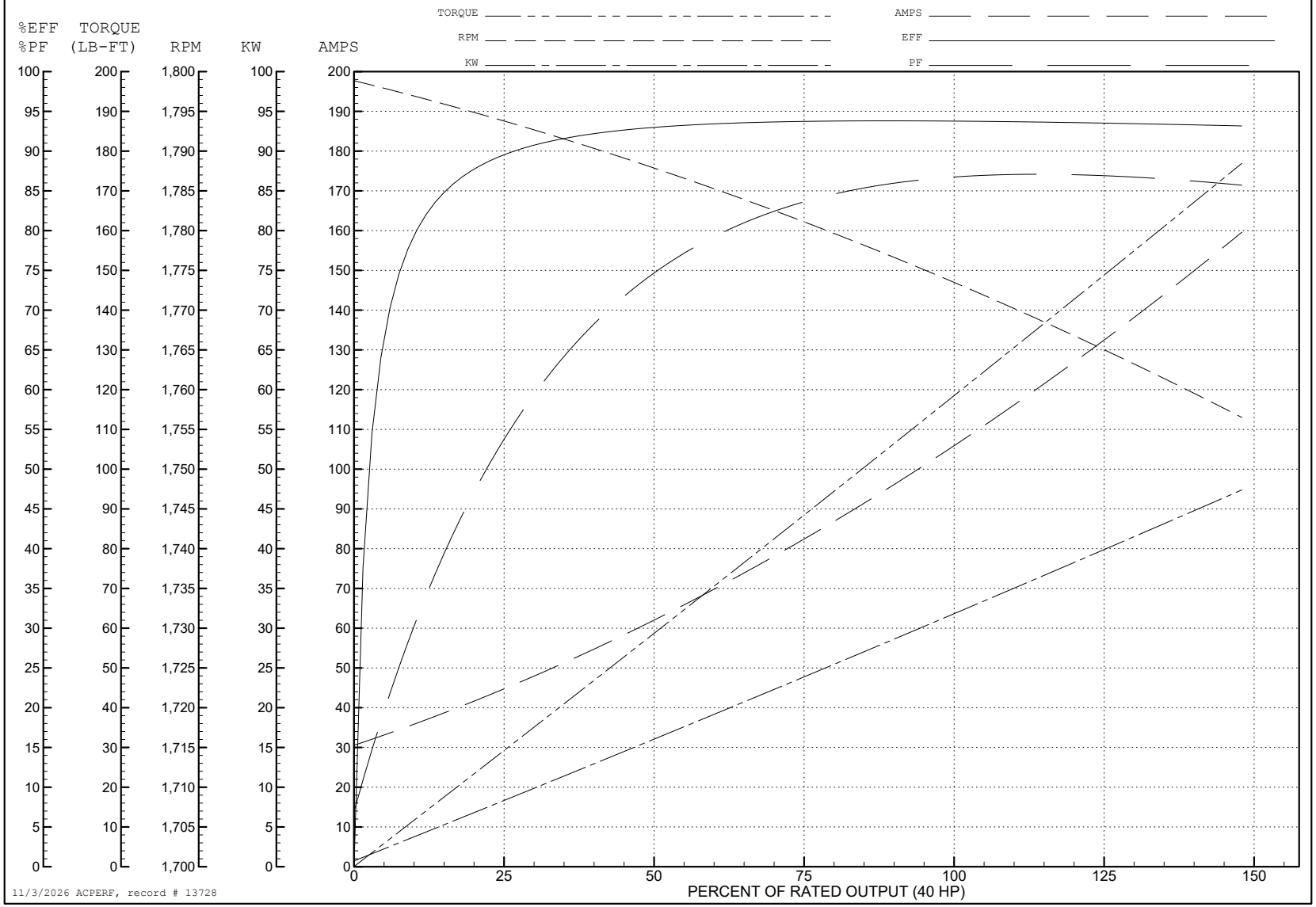
ABB Motors and Mechanical Inc.

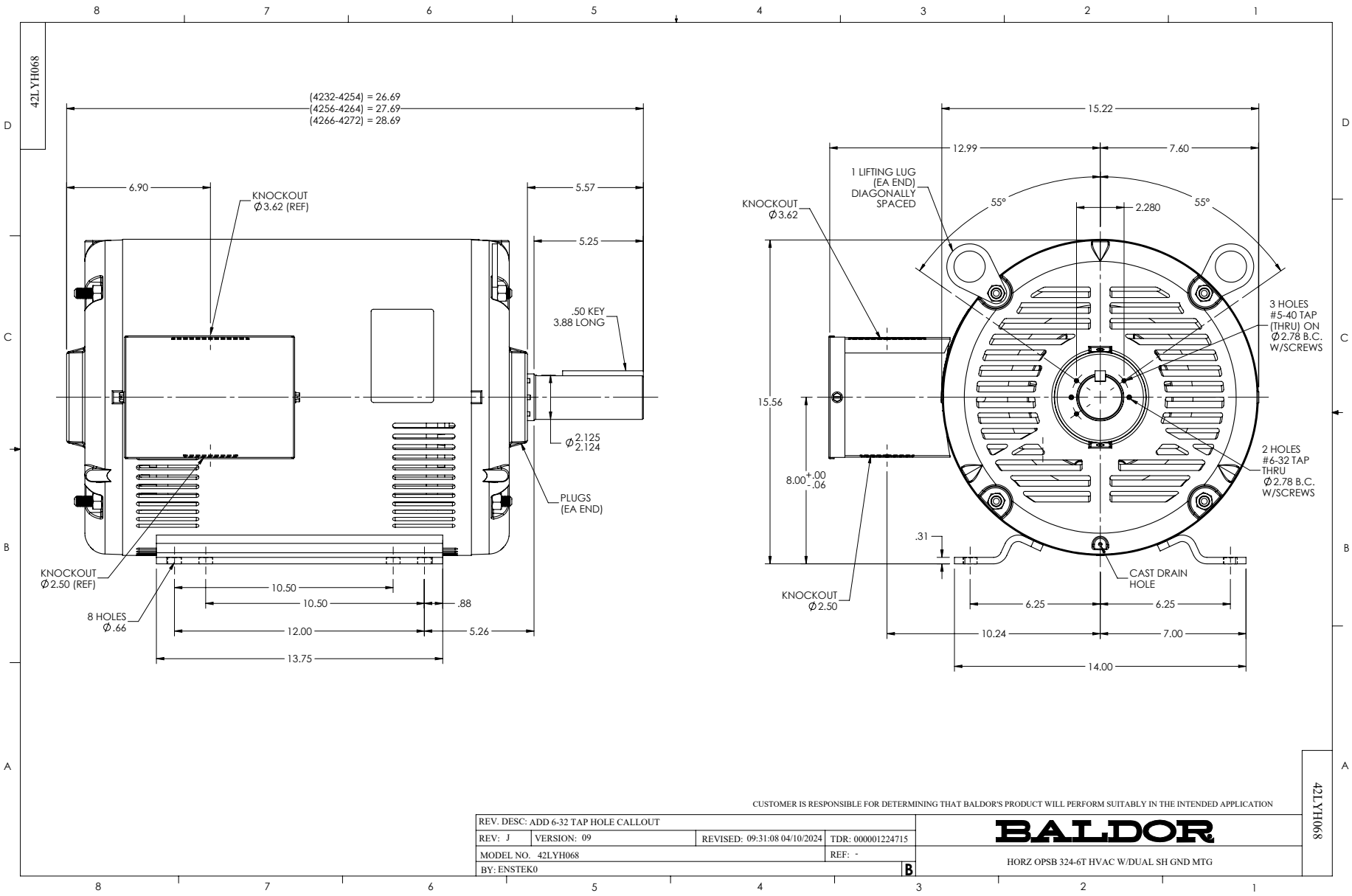
WINDING # 42WGW530

40 HP 3 PH 60 HZ 1775 RPM 200 V 4250M

Typical performance - not guaranteed values.

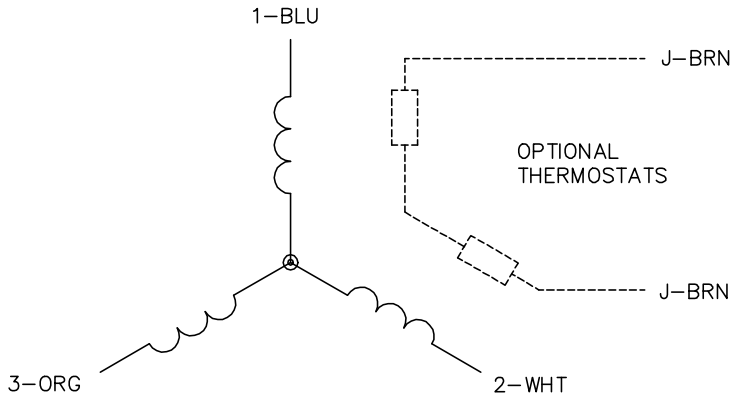
TORQUES(LB-FT): PO=304 PU=152 LR=209 LRA=615

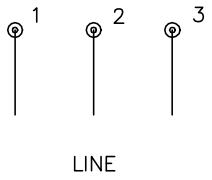



42LYH068
(4232-4254) = 26.69
(4256-4264) = 27.69
(4266-4272) = 28.69
6.90
KNOCKOUT
Ø3.62 (REF)
5.57
5.25
.50 KEY
3.88 LONG
Ø2.125
2.124
PLUGS
(EA END)
KNOCKOUT
Ø2.50 (REF)
8 HOLES
Ø.66
10.50
10.50
.88
12.00
5.26
13.75
15.22
12.99
7.60
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
KNOCKOUT
Ø3.62
55°
55°
2.280
3 HOLES
#5-40 TAP
(THRU) ON
Ø2.78 B.C.
W/SCREWS
15.56
8.00 +.00 -.06
2 HOLES
#6-32 TAP
THRU
Ø2.78 B.C.
W/SCREWS
.31
CAST DRAIN
HOLE
KNOCKOUT
Ø2.50
6.25
6.25
10.24
7.00
14.00
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD 6-32 TAP HOLE CALLOUT
REV: J
VERSION: 09
REVISED: 09:31:08 04/10/2024
TDR: 000001224715
MODEL NO. 42LYH068
REF: -
BY: ENSTEK0
B
BALDOR
HORZ OPSB 324-6T HVAC W/DUAL SH GND MTG
42LYH068

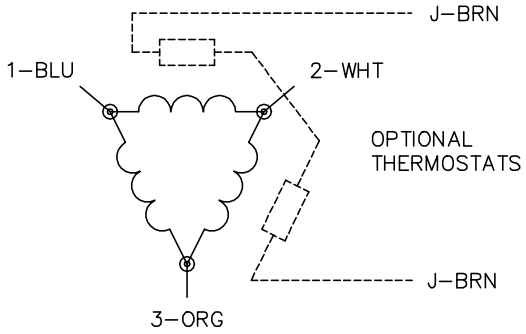
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

SH 1 of 1