

CODE SHEET

| VISTA Projects Limited | | | |
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| VENDOR DRAWING/DOCUMENT SQUAD CHECK | | | |
| A | Reviewed without exception. Proceed with fabrication. Issue final drawings/ documents. | | |
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| SDR CODE | EQUIPMENT TAG | REVIEWED BY | DATE |
| DP-02 | K-0010 | D. PATIL | 2012-03-14 |

PROJECT NAME: Murphy Oil/ 1780 - 016

VENDOR NAME: Eagle Pump & Compressor Ltd.

DOCUMENT NUMBER: A22791B10

VENDOR REVISION: B

DOCUMENT DESCRIPTION: K-0010 FLOW DIAGRAM DUPLEX
NK-100 AIR COMPRESSOR PACKAGE

VENDOR TRANSMITTAL NUMBER: #2

DO NOT SCALE DRAWING

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K-100A/B
ROTARY SCREW AIR COMPRESSOR

MAKE: ROTA NOVA
MODEL: NK-100
SPEED: 5664 RPM
CAPACITY: 108 SCFM @125 PSI
OPERATING PRESS.: 125 PSI

M-100A/B
COMPRESSOR DRIVE MOTOR

HORSEPOWER: 30 HP
RPM: 1790
ENCLOSURE: TEFC
FRAME SIZE: 296T
PHASE/HERTZ/VOLTS: 3/60/230-460
MAKE/MODEL: WESTINGHOUSE

V-100
WET AIR RECEIVER

DESCRIPTION: VERTICAL AIR RECEIVER
SIZE: 30"x84"
CAPACITY: 240 GALLON
DESIGN PRESS.: 200 PSI
DESIGN TEMP.: 400°F(232 °C)
CRN #: F0628.1C
A #:

D-100
HEATLESS AIR DRYER

MAKE: EAGLE
MODEL: EADR130
CAPACITY: 130 SCFM @100°F @100 PSI
DESIGN PRESS.: 200 PSI
DESIGN TEMP.: 200°F
DEWPOINT.: -40°F

NK-100 LEGEND

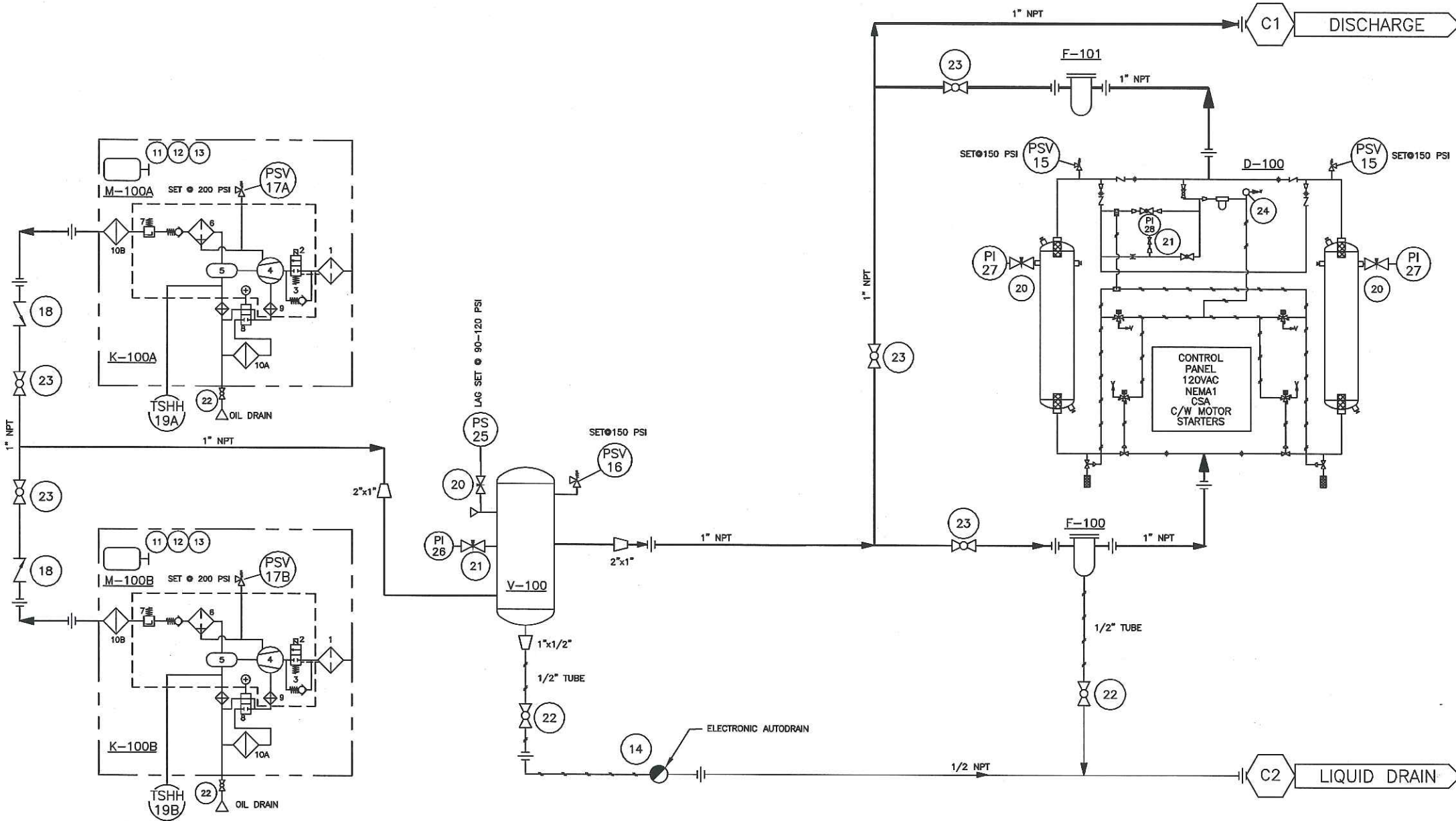
- 1 INTAKE FILTER
- 2 INTAKE CONTROL
- 3 CONTROL FOR ITEM 2
- 4 SCREW COMPRESSOR
- 5 SEPARATOR RECEIVER
- 6 PURIFIER
- 7 MINIMUM PRESSURE VALVE
- 8 OIL THERMOVALVE
- 9 OIL FILTER
- 10A OIL COOLER
- 10B AIR AFTER COOLER

F-100
AIR PRE-FILTER C/W AUTODRAIN

MAKE: DELTECH
MODEL: DF170-B-8-DG
CAPACITY: 170 SCFM
MAWP: 250 PSIG

F-101
AIR AFTERFILTER

MAKE: DELTECH
MODEL: DF170-Y-B-G
CAPACITY: 170 SCFM
MAWP: 300 PSIG



| BILL OF MATERIAL | | | |
|------------------|------------|-----|--|
| ITEM | TAG NO. | QTY | PART NO. DESCRIPTION |
| 11 | | 2 | 3V3.35X4-SH COMPRESSOR SHEAVE c/w SH-35mm BUSHING |
| 12 | | 2 | 3V10.6X4-SK MOTOR SHEAVE c/w SK-1 7/8" BUSHING |
| 13 | | 2 | 4/3VX800 BANDED V-BELT |
| 14 | | 1 | AD2005 AUTODRAIN, 1/2" NPT, 1Ph/60Hz/120VAC |
| 15 | PSV-15 | 2 | PSV1/2-150NP 1/2" RELIEF VALVE SET @ 150PSI R. CONRADER |
| 16 | PSV-16 | 1 | PSV1/2-150NP 1/2" RELIEF VALVE SET @ 150PSI R. CONRADER |
| 17 | PSV-17A/B | 2 | PSV1/4-200NP 1/4" RELIEF VALVE SET @ 200PSI R. CONRADER |
| 18 | | 2 | 1" WHEATLEY 1" NPT WHEATLEY CHECK VALVE |
| 19 | TSHH-19A/B | 2 | R-9550-PVCBOX ROTORCOMP TEMP. CONTROL NEMA 1 |
| 20 | | 3 | MF500SS NEEDLE VALVE 1/2" |
| 21 | | 2 | NO332 NEEDLE VALVE 1/4" |
| 22 | | 4 | N890T 1/2 NAVCO 1/2" NPT REG. PORT BALL VALVE |
| 23 | | 5 | N890T-1 NAVCO 1" NPT REG. PORT BALL VALVE |
| 24 | | 1 | X08-02-000 COLOR CHANGE MOISTURE INDICATOR |
| 25 | PS-25 | 1 | 6900G18 CCS PRESSURE SWITCH |
| 26 | PI-26 | 1 | GL2.5X200 BAKM WIKA 2.5" PRESSURE INDICATOR SS 0-200 PSI |
| 27 | PI-27 | 2 | GL4.0X200 BAKM WIKA 4" PRESSURE INDICATOR SS 0-200 PSI |
| 28 | PI-28 | 1 | GL2.5X200 BAKM WIKA 2.5" PRESSURE INDICATOR SS 0-200 PSI |

| NOZZLE SCHEDULE | | | |
|---|------|--------------|--|
| TAG | SIZE | RATING | TYPE SERVICE |
| C1 | 1" | 3000# | UNION DISCHARGE |
| C2 | 1/2" | 3000# | UNION LIQUID DRAIN |
| PIPING SPEC | | | |
| FABRICATED IN ACCORDANCE WITH ASME B31.3 LATEST EDITION | | | |
| SPEC | A2A | 2" & SMALLER | PIPE: A-106 Gr.B Sch.80 FITTINGS: A-105 3000# FS |
| LARGER THAN 2" | | | |
| INSTRUMENTATION TUBING 316 SS 0.035" WALL THICKNESS | | | |
| TUBE FITTINGS 316 SS | | | |
| FERRULES 316 SS | | | |
| PACKAGE WEIGHT APPROX. 5,000LBS | | | |
| CUSTOMER MURPHY OIL COMPANY LTD. | | | |
| P.O. NO. 54115177-107 | | | |
| TITLE K-0010 FLOW DIAGRAM | | | |
| DUPLX NK-100 AIR COMPRESSOR PACKAGE | | | |
| 7025 - 5th Street S.E. CALGARY, ALBERTA T2H 2Z2 Tel: (403)253-6100 Fax: (403)253-6884 | | | |
| EAGLE PUMP & COMPRESSOR LTD. | | | |
| SCALE NTS REVISION B | | | |
| DWG. No. A22791B10 | | | |

NOTES:

| PAINT SPEC | | | |
|--|----------------------|------------------------|------------|
| SURFACE PREP | SSPC-SP3 | | |
| PRIMER | ONE COAT SHOP PRIMER | | |
| TOP COAT(S) | PROCESS PIPING | EAGLE STANDARD COLOURS | |
| | UTILITY PIPING | EAGLE STANDARD COLOURS | |
| | VESSELS | EAGLE STANDARD COLOURS | |
| | STRUCTURAL | EAGLE STANDARD COLOURS | |
| B ISSUED FOR FABRICATION DP 02/23/12 KC 02/23/12 | | | |
| A ISSUED FOR APPROVAL JM 02/07/12 DP 02/07/12 | | | |
| NO. | REVISION | REV'D | REV. DATE |
| | | CHKD. | CHKD. DATE |

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| SDR CODE | EQUIPMENT TAG | REVIEWED BY | DATE |
| DM-01 | K-0010 | D. PATIL | 2012-03-14 |

PROJECT NAME: Murphy Oil/ 1780-016

VENDOR NAME: Eagle Pump & Compressor Ltd.

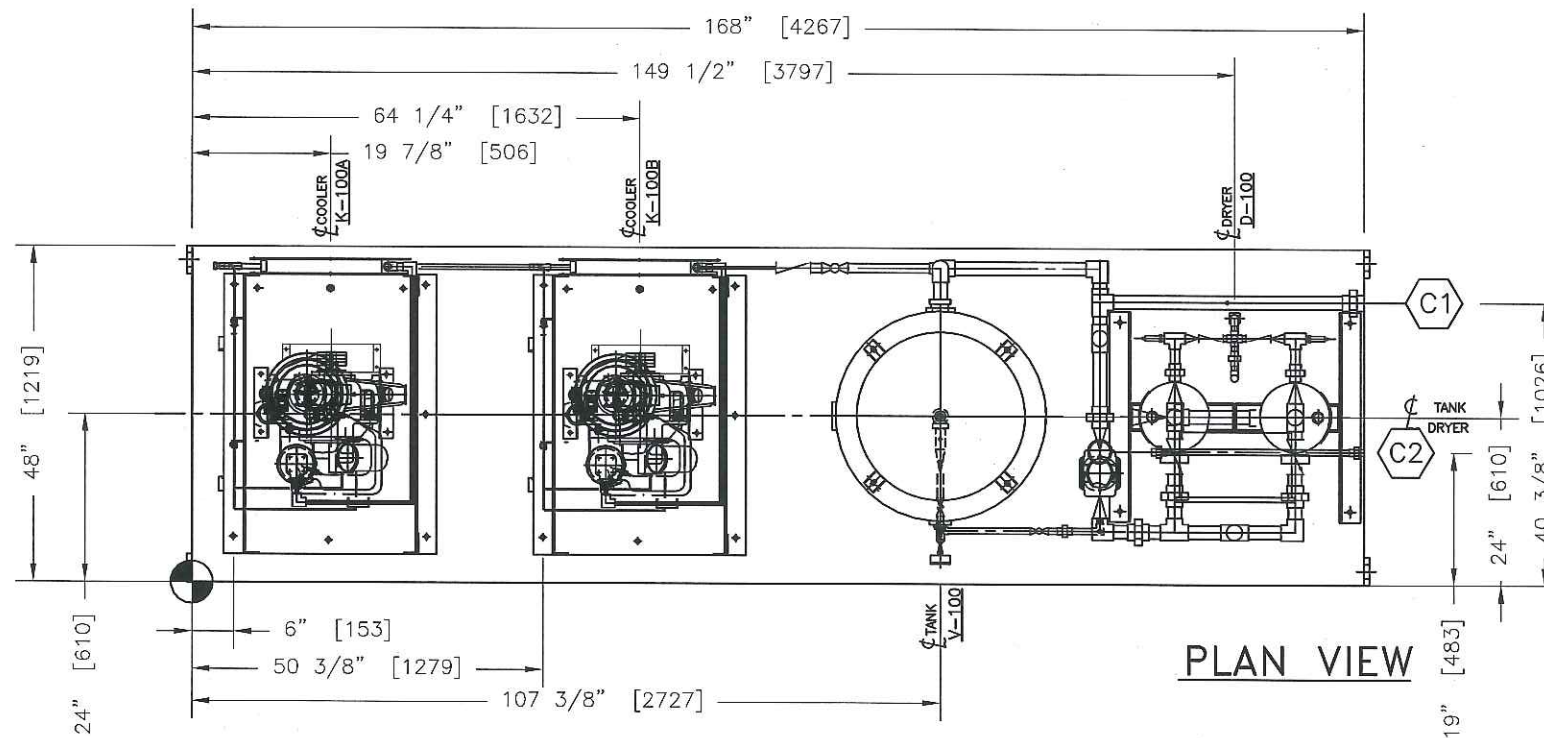
DOCUMENT NUMBER: A22791B20

VENDOR REVISION: B

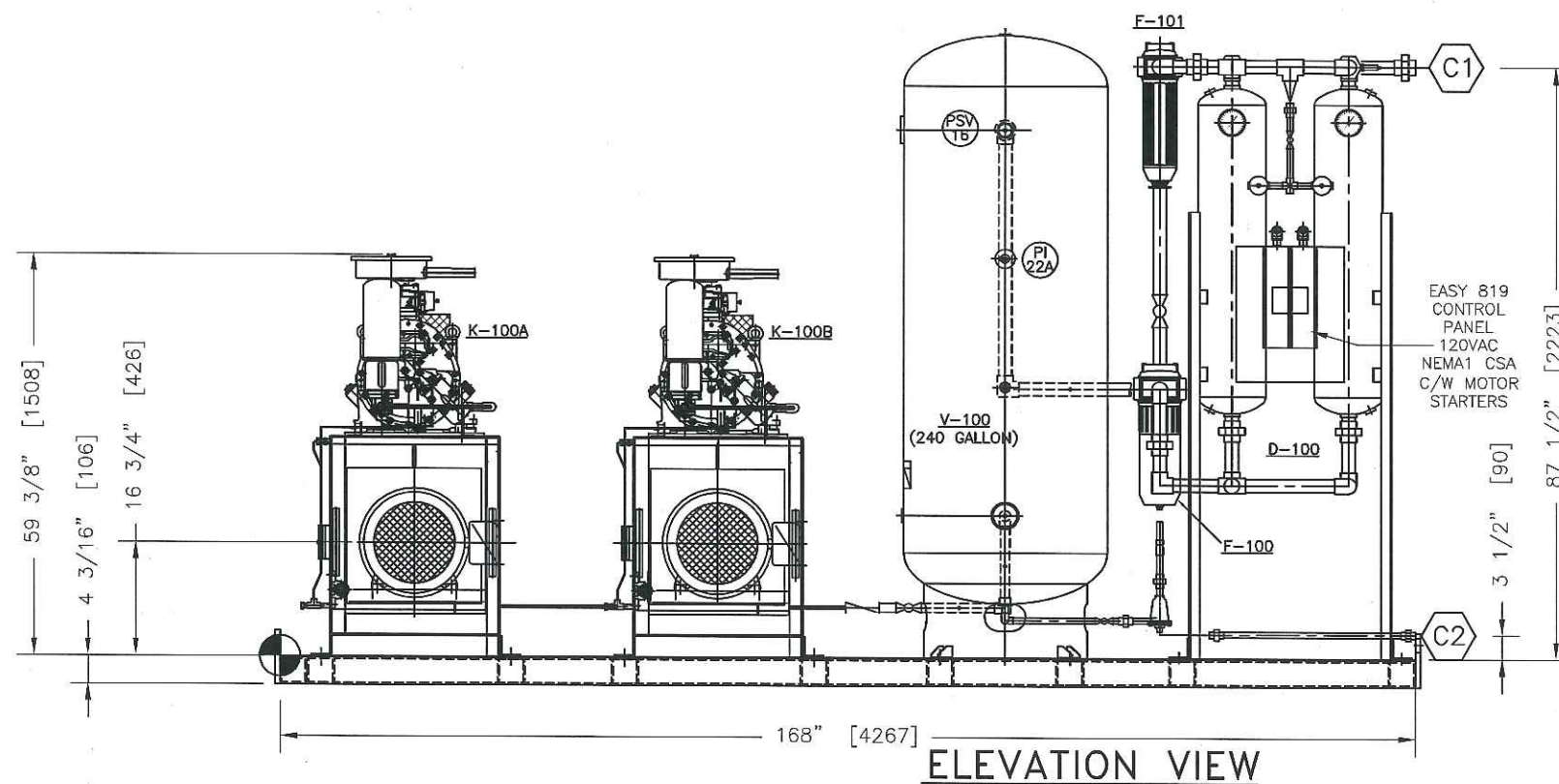
DOCUMENT DESCRIPTION: K-0010 GENERAL LAYOUT NK-100
ROTARY SCREW COMPRESSOR DUPLEX INSTRUMENT
AIR COMPRESSOR UNIT

VENDOR TRANSMITTAL NUMBER: #2

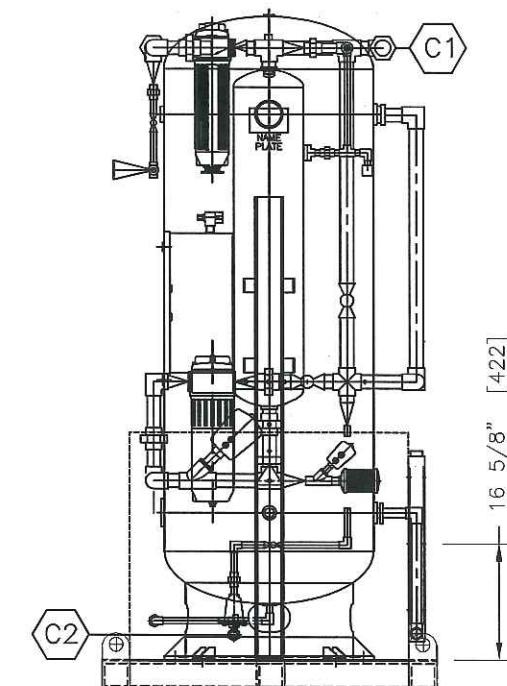
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PLAN VIEW



ELEVATION VIEW



SIDE VIEW

REF.DWG.A21161B20

NOTES:

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| B | ISSUED FOR FABRICATION | JM | 02 | 23 | 12 | DP | 02 | 23 | | | | | |
| A | ISSUED FOR APPROVAL | JM | 02 | 07 | 12 | DP | 02 | 07 | | | | | |
| NO. | REVISION | REV'D | M | D | Y | CHKD. | M | D | | | | | |
| | | | REV | DATE | | | CHKD. | DATE | | | | | |

| | |
|----------|-------------------------|
| CUSTOMER | MURPHY OIL COMPANY LTD. |
|----------|-------------------------|

| | |
|-------|--|
| TITLE | K-0010 GENERAL LAYOUT NK-100 ROTARY SCREW COMPRESSOR DUPLEX INSTRUMENT AIR COMPRESSOR UNIT |
|-------|--|

7025 - 5th Street S.E.
CALGARY, ALBERTA
T2H 2G2
Ph: (403)253-0100
Fx: (403)253-8884
E-mail: teceagle@eagle-pc.com



| | |
|----------|--------------|
| P.O. NO. | 54115177-107 |
|----------|--------------|

| | | | | |
|----------|------|----|----|----|
| DRWN. BY | DATE | M | D | Y |
| JM | | 02 | 07 | 12 |
| CKD. BY | DATE | M | D | Y |
| DP | | 02 | 07 | 12 |
| APV'D BY | DATE | M | D | Y |

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| SCALE | REVISION |
| NTS. | B |

DWG. No. A22791B20

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| DC-03 | K-0010 | D. PATIL | 2012-03-14 |

PROJECT NAME: Murphy Oil/ 1780 - 016

VENDOR NAME: Eagle Pump & Compressor Ltd.

DOCUMENT NUMBER: A22791B30

VENDOR REVISION: B

DOCUMENT DESCRIPTION: K-0010 STRUCTURAL SKID 48" x 168"

VENDOR TRANSMITTAL NUMBER: #2

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| SDR CODE | EQUIPMENT TAG | REVIEWED BY | DATE |
| DE-04 | K-0010 | D. PATIL | 2012-03-14 |

PROJECT NAME:

Murphy Oil/ 1780-016

VENDOR NAME:

Eagle Pump & Compressor Ltd.

DOCUMENT
NUMBER:

A22791B40

VENDOR
REVISION:

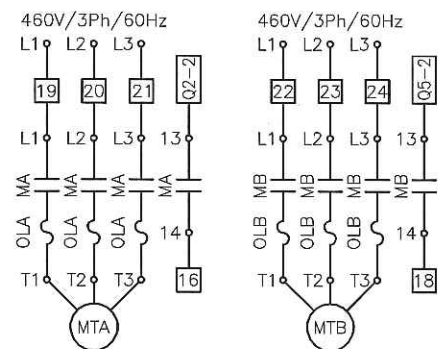
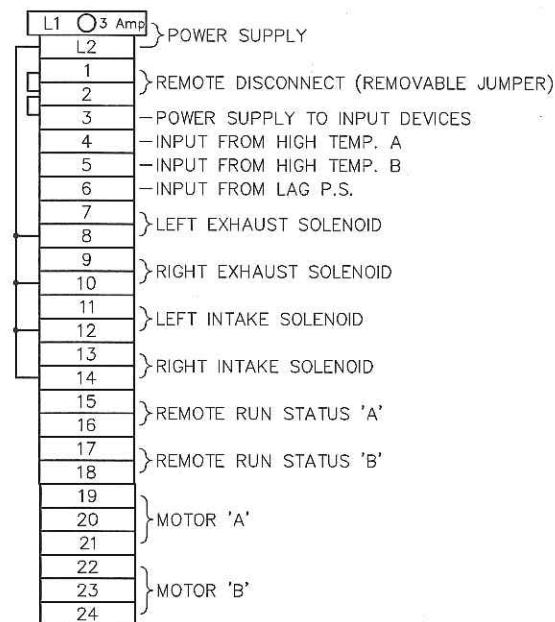
B

DOCUMENT
DESCRIPTION:

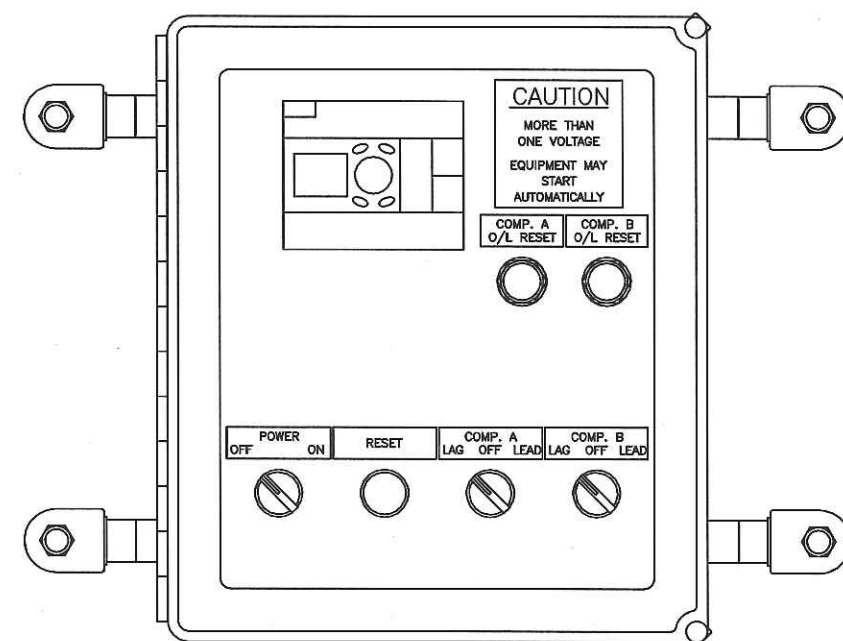
K-0010 CONTROL PANEL NK-100/EADR-130
INSTRUMENT AIR COMPRESSOR NEMA 1

VENDOR
TRANSMITTAL
NUMBER:

#2



| BILL OF MATERIALS | | | | |
|-------------------|---------|------|----------------------|---|
| ITEM | TAG No. | QTY. | PART No. | DESCRIPTION |
| 1 | | 1 | A14128CHQRFGW | HOFFMAN FIBERGLASS HINGED COVER TYPE 4X ENCLOSURE C/W PANEL |
| 2 | | 1 | TA 32X15/LL 2M/ST/ZN | WEIDMÖLLER TERMINAL RAIL |
| 3 | L1/20 | 2 | EK 1 TS 32 M4X18 | WEIDMÖLLER TERMINAL END BRACKET |
| 4 | L1 | 1 | SAKS 3 | WEIDMÖLLER FUSE TERMINAL |
| 5 | L1 | 1 | AP SAKS1+3 KRG | WEIDMÖLLER FUSE TERMINAL END PLATE |
| 6 | L1 | 1 | BK/ABC-3 | COOPER BUSSMAN FUSE |
| 7 | L2-20 | 21 | SAK 2.5 | WEIDMÖLLER FEED-THROUGH TERMINAL |
| 8 | 20 | 1 | AP SAK2.5 | WEIDMÖLLER TERMINAL END PLATE |
| 9 | 19-24 | 6 | SAK 6N | WEIDMÖLLER FEED-THROUGH TERMINAL |
| 10 | 24 | 1 | AP SAK4-10 | WEIDMÖLLER TERMINAL END PLATE |
| 11 | HS1 | 1 | ZB4 BD2 | TELEMECANIQUE HAND SWITCH - POWER |
| 12 | HS2 | 1 | XB4 BA21 | TELEMECANIQUE HAND SWITCH - RESET |
| 13 | HS3/4 | 2 | ZB4 BD3 | TELEMECANIQUE HAND SWITCH - COMP. MODE 'A' & 'B' |
| 14 | SV1/2 | 2 | DRSOLENOID | SOLENOID - DRYER EXHAUST LEFT & RIGHT |
| 15 | SV3/4 | 2 | DRSOLENOID | SOLENOID - DRYER INTAKE LEFT & RIGHT |
| 16 | PS1 | 1 | 69HA2 | PRESSURE SWITCH - LAG |
| 17 | TSA/B | 2 | R-9550-PVCBOX | HIGH TEMP. SWITCH 'A' & 'B' |
| 18 | MA/B | 2 | SEE CATALOGUE | SPRECHER + SCHUH MOTOR STARTER 'A' & 'B' |
| 19 | MTA/B | 2 | SEE CATALOGUE | TECO-WESTINGHOUSE MOTOR 'A' & 'B' |
| 20 | OLA/B | 2 | E22PB7L | CUTLER-HAMMER PUSH BUTTON WITH PUSH ROD |



All linear dimensions are in inches unless otherwise noted. All linear dimensions in [] brackets are in mm unless otherwise noted.

| | | | | | | | | | | | | | | | |
|-----|---------------------------|--|--|--|--|-------------|------|----|----|-------------|------|----|----|--|--|
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| B | RE-ISSUED FOR FABRICATION | | | | | DP | 02 | 23 | 12 | KC | 02 | 23 | 12 | | |
| A | ISSUED FOR FABRICATION | | | | | JM | 02 | 07 | 12 | DP | 02 | 07 | 12 | | |
| No. | REVISION | | | | | REV'D BY | M | D | Y | CHK'D BY | M | D | Y | | |
| | | | | | | | DATE | | | | DATE | | | | |

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E-mail: teceagle@eagle-pc.com

| | |
|-------------------|----------|
| SCALE | REVISION |
| 1 : 4 | B |
| DWG. No A22791B40 | |

