

PART NUMBER	MODEL NUMBER	CUSTOMER CONNECTION	SIGHTGLASS	OEL
497-1609-00	ZR160/190KC/KCE	BRAZED	NO	NO
	ZP154/182KCE			
	ZH64/75KCE			
497-1609-01	ZR160/190KC/KCE	ROTALOCK	NO	NO
	ZP154/182KCE			
	ZH64/75KCE			
497-1609-02	ZR160/190KC/KCE	BRAZED	YES	YES
	ZP154/181/182KCE			
	ZH64/75KCE			
497-1609-03	ZR160/190KC/KCE	ROTALOCK	YES	YES
	ZP154/181/182KCE			
	ZH64/75KCE			

SPECIFICATIONS	
ES NO.	DESCRIPTION
ES92-155	CONVERSION-METRIC
ES81-340	TORQUE SPEC

NOTES:

- 1 ALL TOLERANCES ± 1.5 (0.06) UNLESS OTHERWISE SPECIFIED. DUE TO ACCUMULATED ASSEMBLY TOLERANCES THE LISTED COMPONENTS MAY VARY FROM THE MOUNTING HOLES AS TABULATED.
- 2 SUCTION FITTING ± 3.0 (0.12)
- 3 DISCHARGE FITTING ± 3.0 (0.12)
- 2. MOUNTING KIT: 527-0210-00
- 3. TUBE ENDS MUST BE PLUGGED.
- 4 GROUNDING SCREW AND WASHER PER BOM.

ALERT CODE (RED) / CÓDIGO DE ALERTA (ROJO)	TYPE / TIPO	EVENT / EVENTO
1	LOCKOUT / BLOQUEADO / TRIP / DISPARO	LOSS OF FUNCTION / PERDIDA DE FUNCION / MOTOR HIGH TEMPERATURE / TEMPERATURA DEL MOTOR ELEVADA
2	LOCKOUT/TRIP / BLOQUEADO / DISPARO	OPEN / SHORT MOTOR THERMISTOR / TERMISTOR DEL MOTOR EN CIRCUITO ABIERTO O CORTOCIRCUITO
3	LOCKOUT / BLOQUEADO	SHORT CYCLING / CICLOS CORTOS
4	N/A	N/A
5	N/A	FUTURE USE / USO FUTURO
6	LOCKOUT/TRIP / BLOQUEADO / DISPARO	MISSING PHASE / PERDIDA DE FASE
7	LOCKOUT / BLOQUEADO	REVERSE PHASE / INVERSIÓN DE FASE
8	N/A	FUTURE USE / USO FUTURO
9	TRIP / DISPARO	MODULE LOW VOLTAGE / BAJO VOLTAJE AL MÓDULO
WARNING (GREEN) / PRECAUCIÓN (VERDE)	TYPE / TIPO	EVENT / EVENTO
SOLID / SOLIDO	NORMAL / NORMAL	NORMAL OPERATION / OPERACION NORMAL
1	WARNING / PRECAUCION	LOSS OF COMMUNICATION / PERDIDA DE COMUNICACION
2	WARNING / PRECAUCION	FUTURE USE / USO FUTURO
3	WARNING / PRECAUCION	SHORT CYCLING / CICLOS CORTOS
4	N/A	N/A
5	WARNING / PRECAUCION	FUTURE USE / USO FUTURO

DIP SWITCHES / INTERRUPTORES DIP

DIP SWITCH / INTERRUPTOR	PURPOSE / PROPOSITO	ON = 1 / ENCENDIDO	OFF = 0 / APAGADO
1-LSB	UNIQUE ADDRESS / DIRECCION UNICA	1	0
2	RANGE 1 TO 32 / RANGO DE 1 A 32	1	0
3	(EXAMPLE = 12) / (EJEMPLO = 12)	1	0
4		1	0
5-MSB		1	0
6	WINDING PROTECTION / PROTECCION EN DEVANADOS	0	1
7	PARTY / PASADADO	0	1
8	COMMUNICATION / COMUNICACION	0	1
9	TEMP CONNECTOR CONFIGURATION / CONFIG DE CONECTOR DE SENSOR DE TEMPERATURA	0	1
10	SHORT CYCLE PROTECTION / PROTECCION CONTRA CICLOS CORTOS	ENABLE / ACTIVADO	DISABLE / DESACTIVADO

TEMP SENSORS / SENSORES DE TEMPERATURA

SYMBOLS / SIMBOLOS

- 1] PROTECTOR MODULE VOLTAGE / VOLTAGE DEL MÓDULO DE PROTECCION
- 2] TO CONTROL CIRCUIT / AL CIRCUITO DE CONTROL
- 3] THERMAL SENSORS DO NOT SHORT / SENSORES DE TEMPERATURA - NO CONECTAR EN CORTO CIRCUITO
- 4] PHASE SENSING / SENSOR DE FASES

LED'S / DIODOS LUMINOSOS

TEMPERATURE JUMPER / CONECTOR DE PUENTE

MOTOR WINDINGS CONNECTIONS / CONEXIONES DE DEVANADO DEL MOTOR

WARNING: GREEN FLASHING + PAUSE 2 SEC. / PRECAUCION: LUZ VERDE DESTELLANTE + PAUSA DE 2 SEG.
TRIP: RED FLASHING + PAUSE 2 SEC. / DISPARO: LUZ ROJA DESTELLANTE + PAUSA DE 2 SEG.
LOCKOUT: RED FLASHING + PAUSE 2 SEC. + SOLID 3 SEC. + PAUSE 2 SEC. / BLOQUEO: LUZ ROJA DESTELLANTE + PAUSA DE 2 SEG. + LUZ SOLIDA POR 3 SEG. + PAUSA DE 2 SEG.

USE COPPER CONDUCTORS ONLY. USE MINIMUM 19°C WIRE FOR AMPACITY DETERMINATION. USE THIS EQUIPMENT ON A GROUNDING SYSTEM ONLY. PROTECTOR MODULE AND OPTIONAL GRANULATED HEATS MUST BE CONNECTED ONLY TO THEIR RATED VOLTAGE. OVERCURRENT PROTECTION DEVICE RATING AND TYPE MUST BE IN ACCORDANCE WITH REGULATORY AGENCY END PRODUCT APPROVALS - SEE SYSTEM NAMEPLATE.

UTILICE CONDUCTORES DE COBRE (OBLIGATORIO). UTILICE ESTE EQUIPO EN SISTEMAS CONECTADOS A TIERRA SOLAMENTE. SE PROHIBE PROTECCION DE FALLA MONOFASICA EN EL CIRCUITO PRIMARIO. EL MÓDULO DE PROTECCION Y EL CALENTADOR DE CARTER OPCIONAL DEBERAN CONECTARSE A SU VOLTAJE NOMINAL RESPECTIVO. EL TIPO Y LAS CARACTERISTICAS NOMINALES DEL DISPOSITIVO DE PROTECCION DE SOBRECORRIENTE DEBERAN RESPETAR LAS APROBACIONES DE LA AGENCIA REGULAMENTARIA PARA EL PRODUCTO FINAL - VEA LA PLACA DE DATOS

ENG NOTICE NO.	REV.NO.	REVISIONS	DATE	BY	CHKD	APPR
ECN201120	4	SEE SHEET 2	08-15-16	JLS	LLB	KJR
ECN101752	3	ADDED ZH64/75KCE MODELS	10-30-15	EL	JL	KJR
ECN009051	2	REVISED AND REDRAWN WITH CHANGES	09-24-14	VPV	LLB	KJR
ECN007348	0	RELEASED	10-09-13	NJG	LLB	KJR



INTERPRET PER ASME Y14.5M-1994 AND EMERSON CLIMATE TECHNOLOGIES, INC. DESIGN STANDARDS DS2002

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

CRITICAL PRODUCT CHARACTERISTICS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE MILLIMETER OR (INCH)

TOLERANCES:
 1- PLACE \pm N/A
 2- PLACE \pm N/A
 ANGULAR \pm N/A

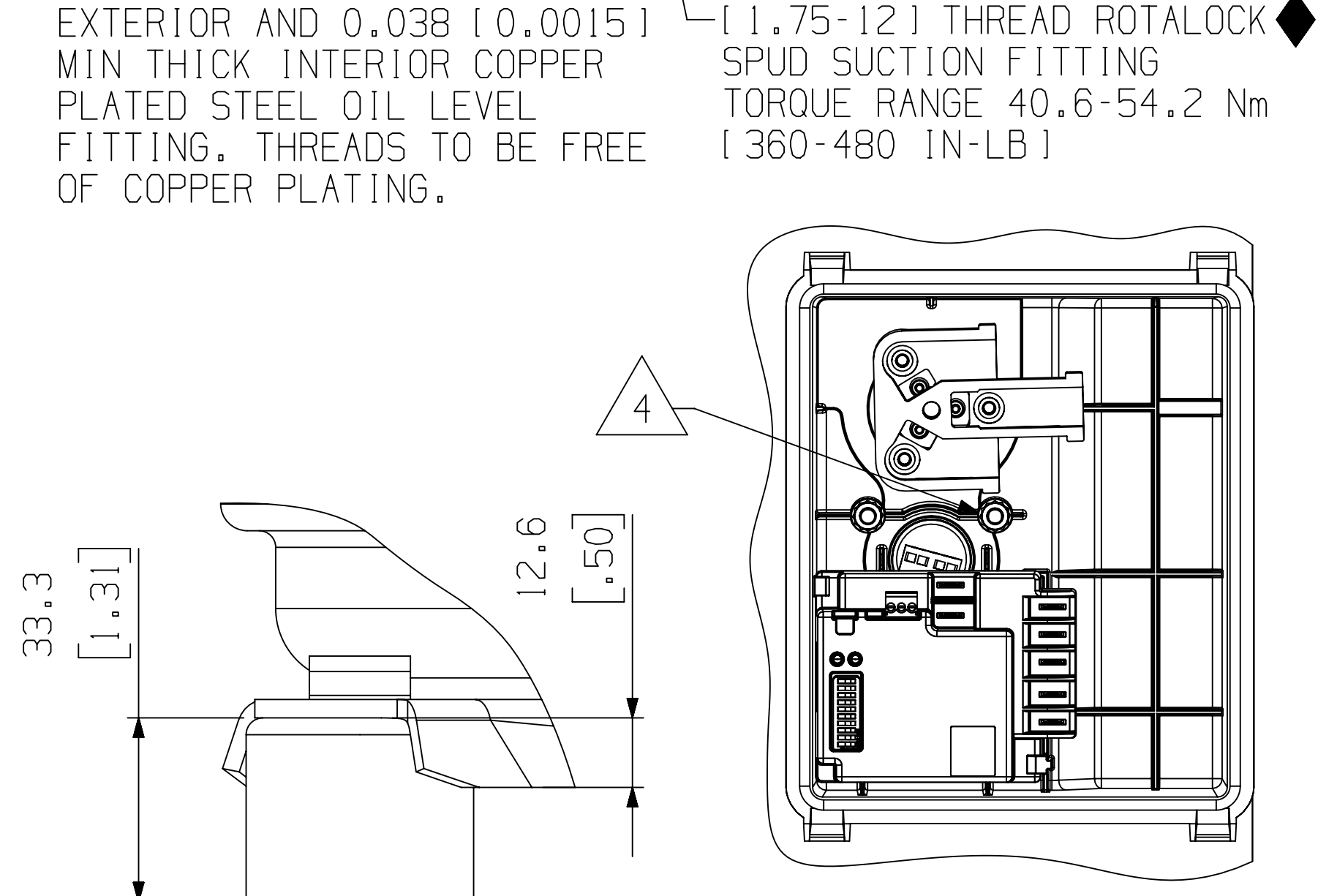
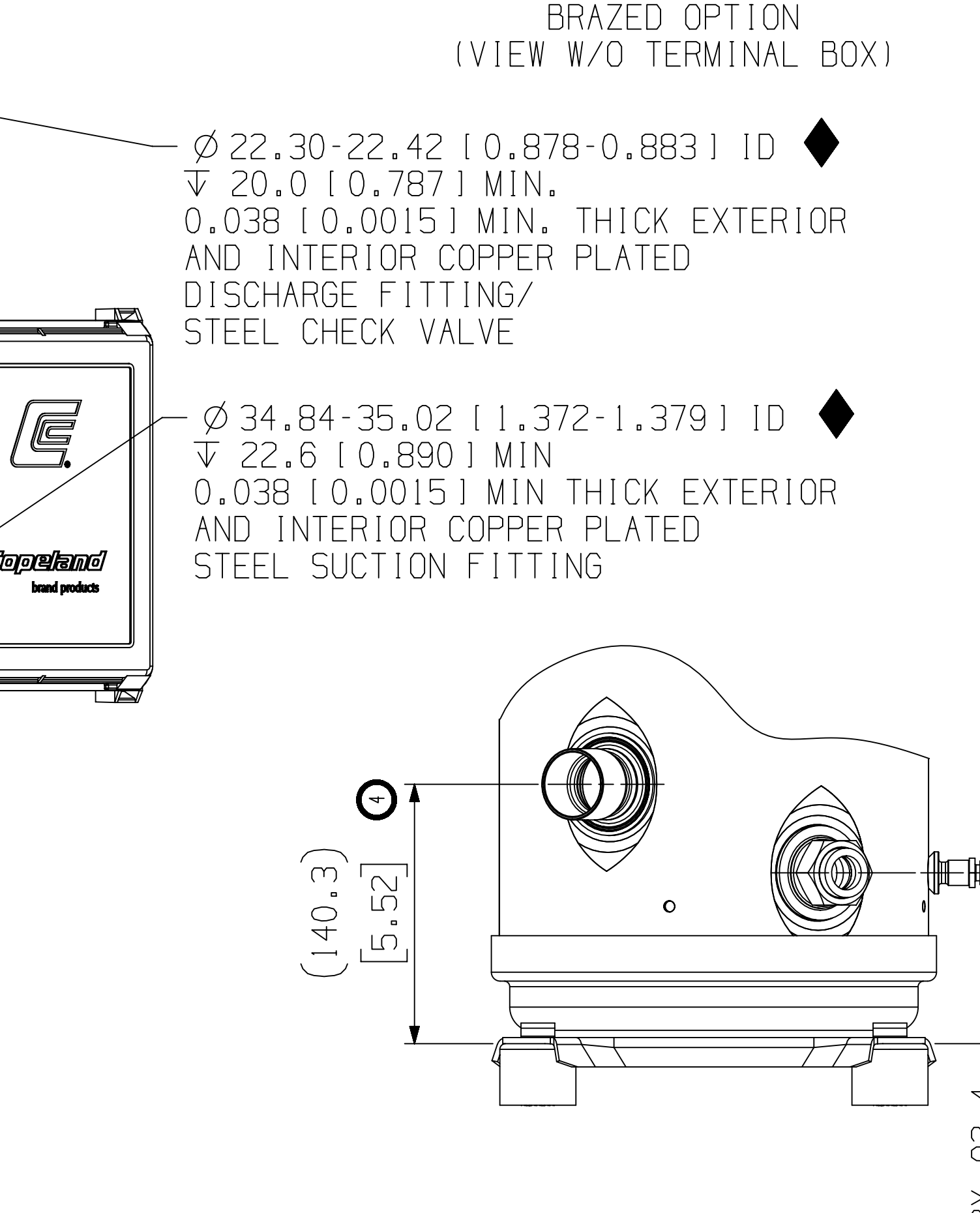
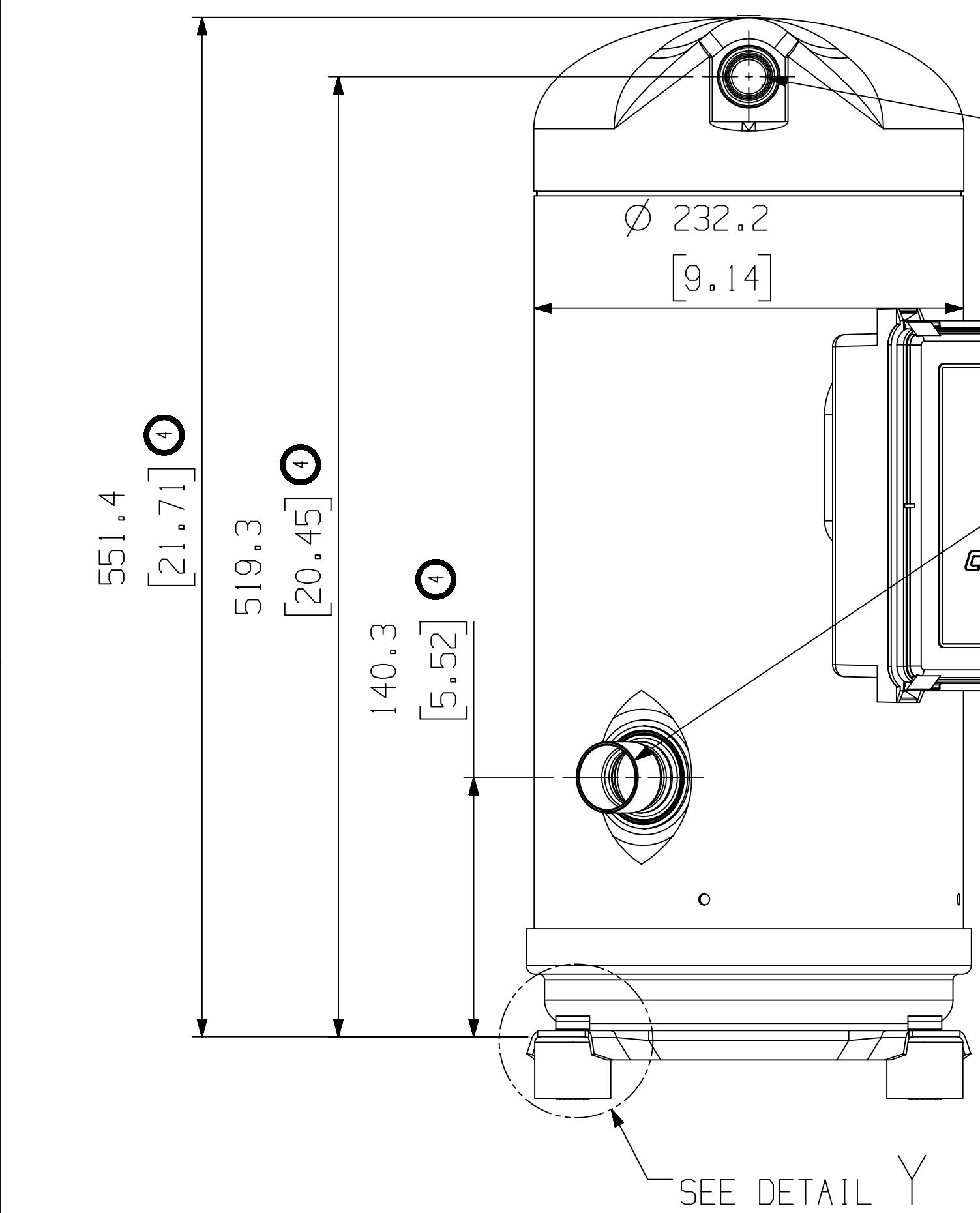
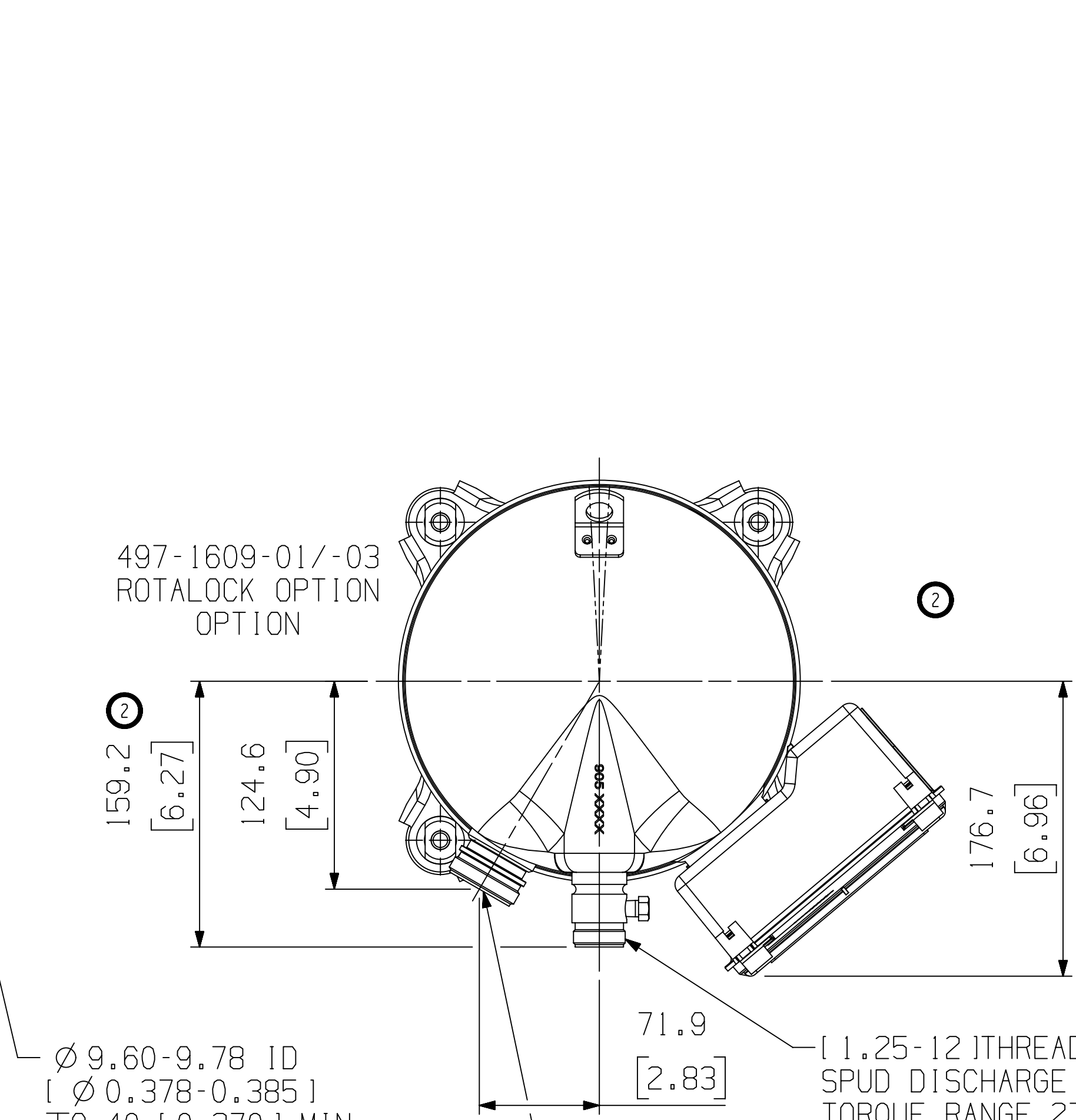
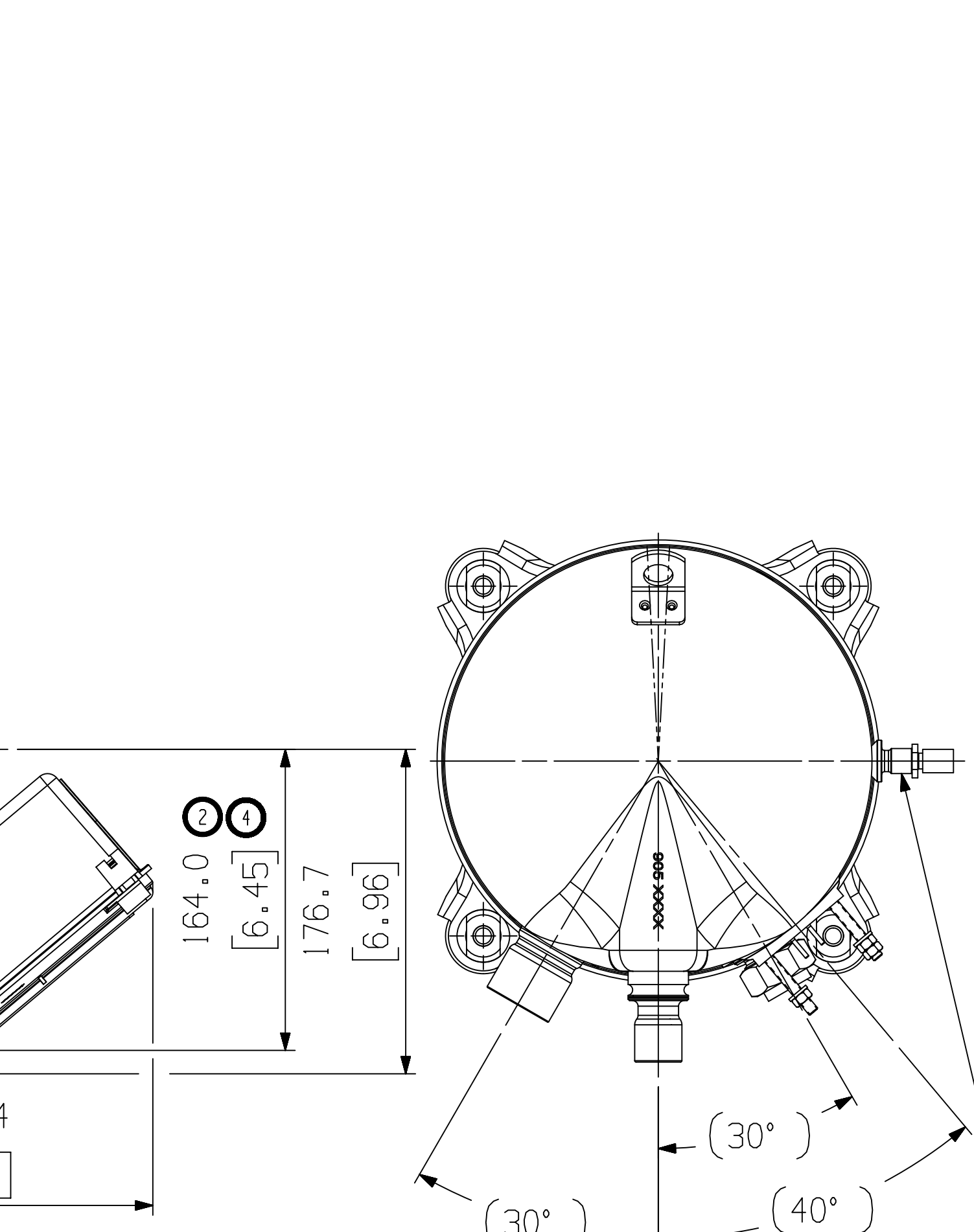
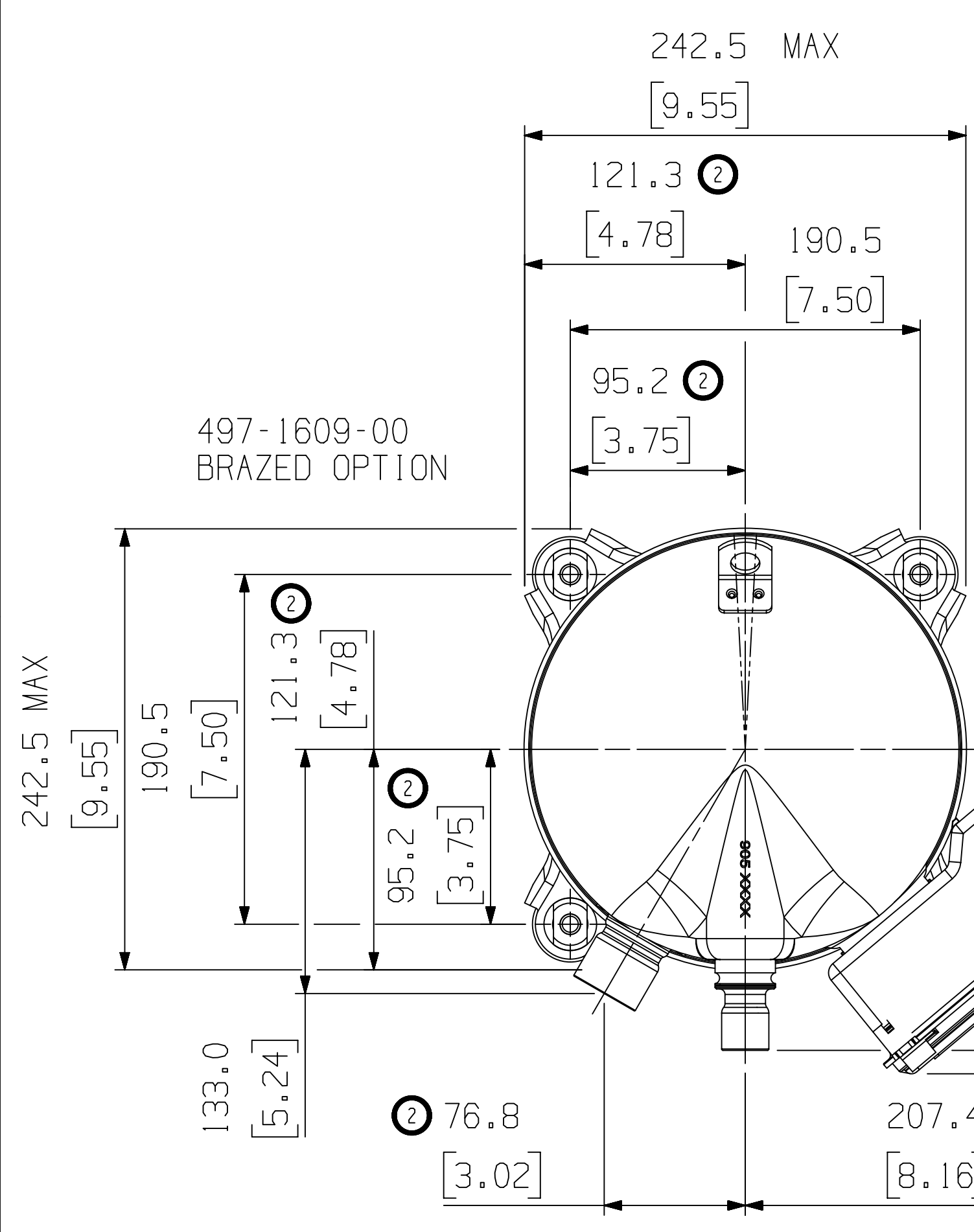
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CONFIDENTIALITY NOTICE

MATERIAL SPECIFICATION	N/A	DRAWN BY	VPV	SUPERSEDES DWG. NO. / REV. NO.	497-1609-00/001
		DATE	09-24-14	SCALE	3:8
				DATE FORMAT:	MM-DD-YY
TITLE	REF DWG-WELD COMP ASM	DRAWING NUMBER	497-1609-00	SHEET 1 OF 2	DWG 4

UNCONTROLLED - DO NOT MODIFY

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Ø 22.30-22.42 [0.878-0.883] ID
 ▽ 20.0 [0.787] MIN.
 0.038 [0.0015] MIN. THICK EXTERIOR
 AND INTERIOR COPPER PLATED
 DISCHARGE FITTING/
 STEEL CHECK VALVE

Ø 34.84-35.02 [1.372-1.379] ID
 ▽ 22.6 [0.890] MIN.
 0.038 [0.0015] MIN THICK EXTERIOR
 AND INTERIOR COPPER PLATED
 STEEL SUCTION FITTING

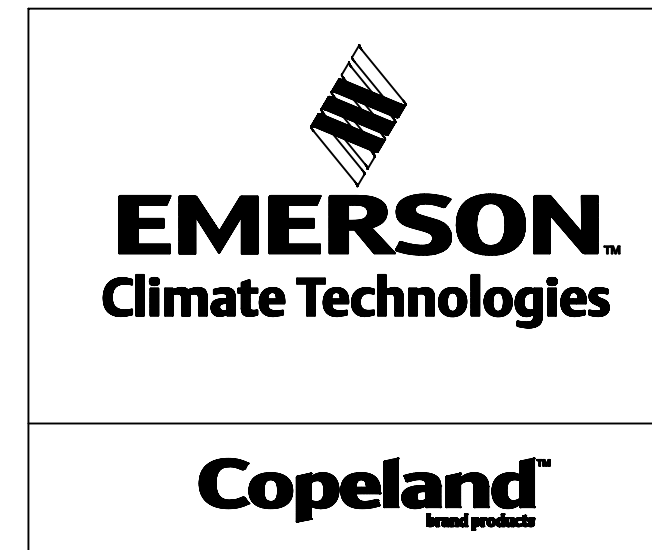
Ø 9.60-9.78 ID
 [Ø 0.378-0.385]
 ▽ 9.40 [0.370] MIN
 M9 X 1.25-6G THRU
 0.06 [0.002] MIN THICK
 EXTERIOR AND 0.038 [0.0015]
 MIN THICK INTERIOR COPPER
 PLATED STEEL OIL LEVEL
 FITTING. THREADS TO BE FREE
 OF COPPER PLATING.

[1.25-12] THREAD ROTALOCK
 SPUD DISCHARGE CHECK VALVE
 TORQUE RANGE 27.1-40.6 Nm
 [240-360 IN-LBS]

[1.75-12] THREAD ROTALOCK
 SPUD SUCTION FITTING
 TORQUE RANGE 40.6-54.2 Nm
 [360-480 IN-LB]

TERMINAL BOX LAYOUT STANDARD
 SCALE 1:2

DETAIL Y
 SCALE 1:1



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 ANGULAR ± N/A

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	MATERIAL SPECIFICATION	DRAWN BY VPV	SUPERSEDES DWG. NO. / REV. NO. 497-1609-00/001
N/A	DATE 09-24-14	SCALE 3:8	DATE FORMAT: MM-DD-YY
TITLE REF DWG-WELD COMP ASM	DRAWING NUMBER 497-1609-00	SHEET 2 OF 2	DWG 4 SIZE