

A ☒ Document accepted as final.
P ☐ Incorporate comments and resubmit the document.
X ☐ Document not accepted and

REFERENCE - SAMPLE

MAC - General Arrangement Drawing (incl. Customer Connection List)

CONFIDENTIAL

Vendor Name – Atlas Copco Energas	Vendor Project Number - 53138976
Vendor Document Number - 53138976-05	Vendor Document Revision - 04

		Date
DEP	ENPAS	04.10.2023
Name	Holger Graichen	
0 Comments		

Comments:	Dpt.:	Date:
None	ENCR1	5. Oct 2023
Name:	Bernhard Klumm	

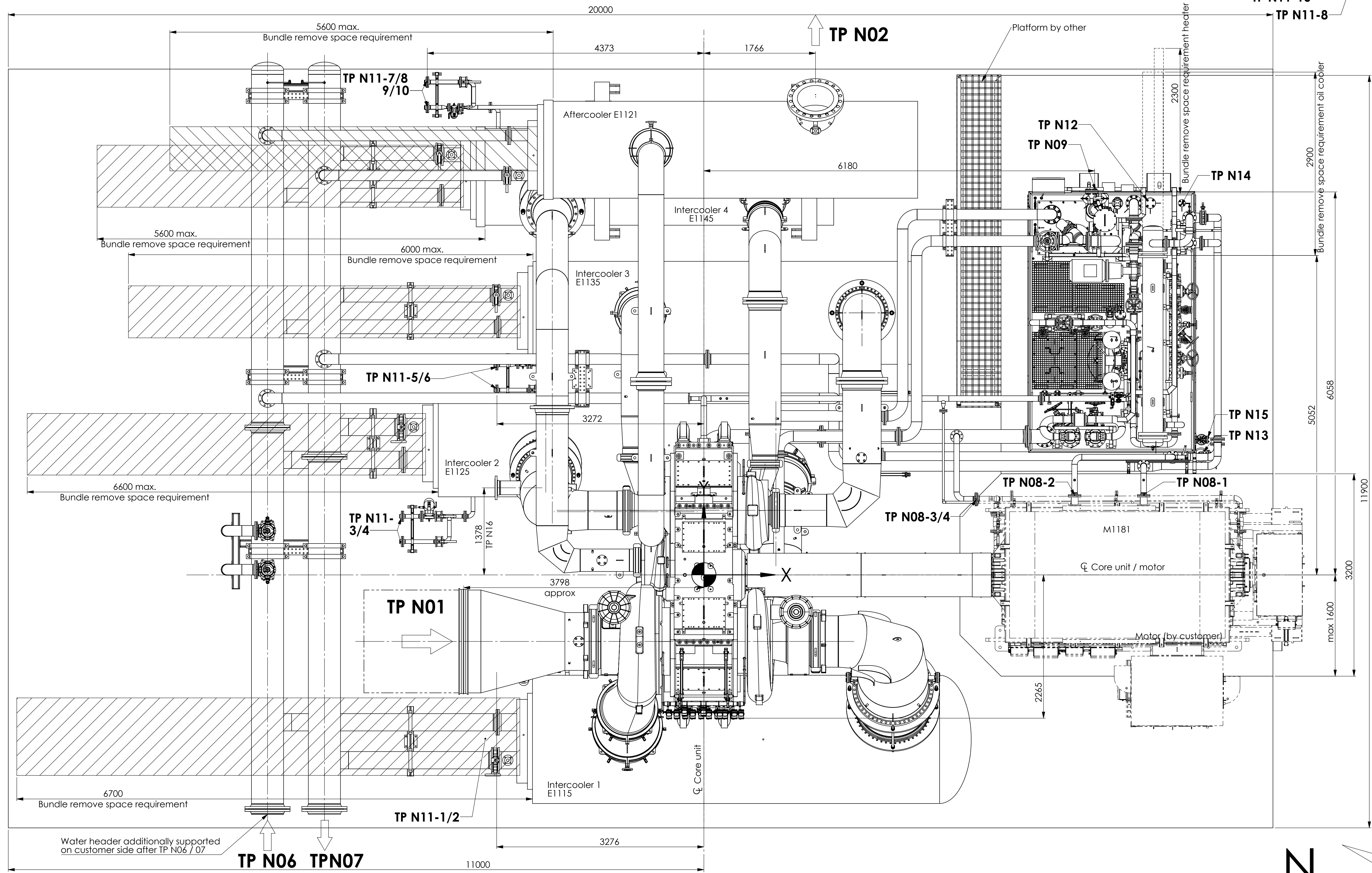
IFR	05	27.09.2023	M. Meschenich	[D.Lux]	[T. Heinen]	
IFR	04	31.08.2023	[D.Lux]	[W. Wanner]	[T. Heinen]	
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Status	Issue	Date	Prepared	Reviewed	Approved	Remark

Confidential

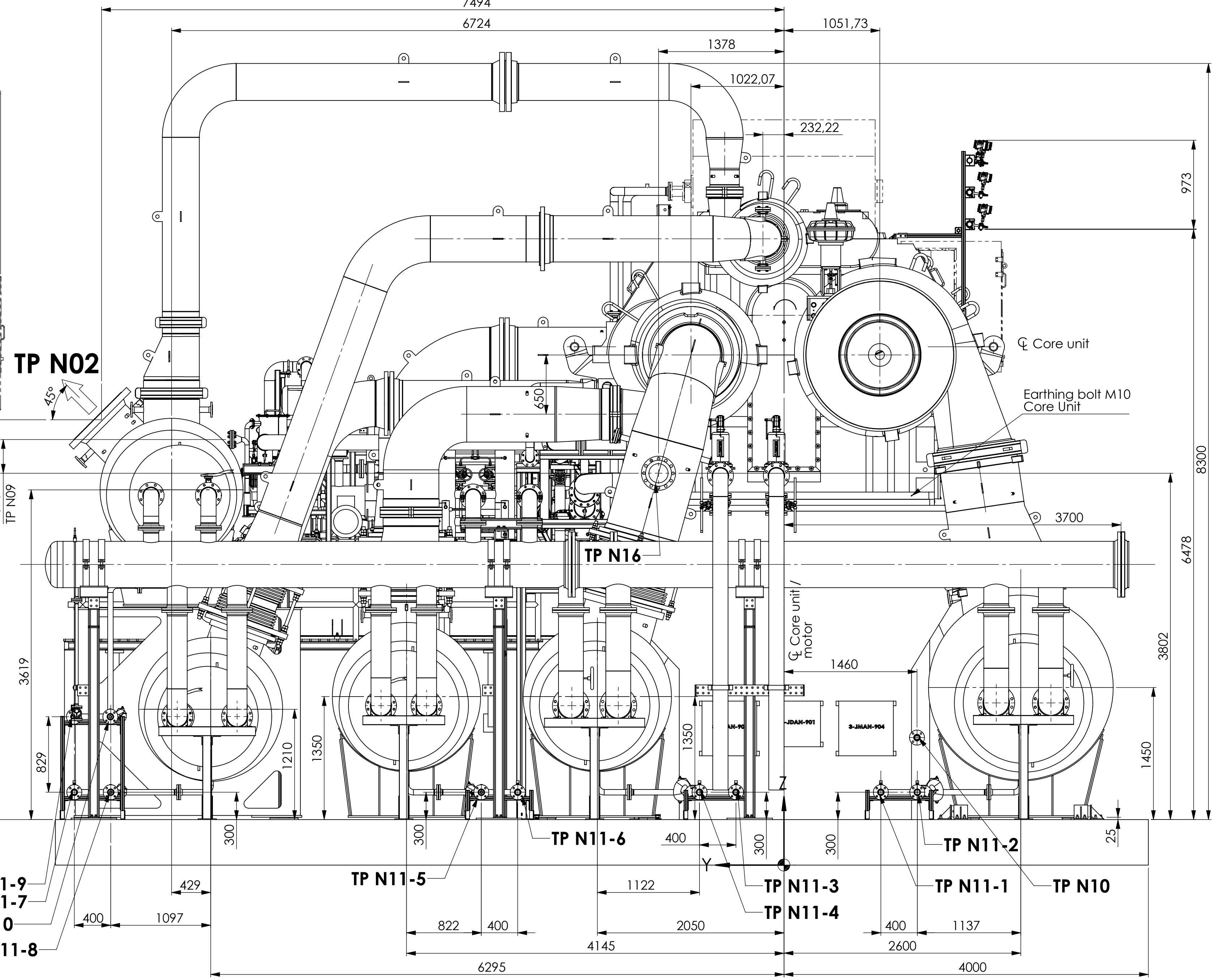
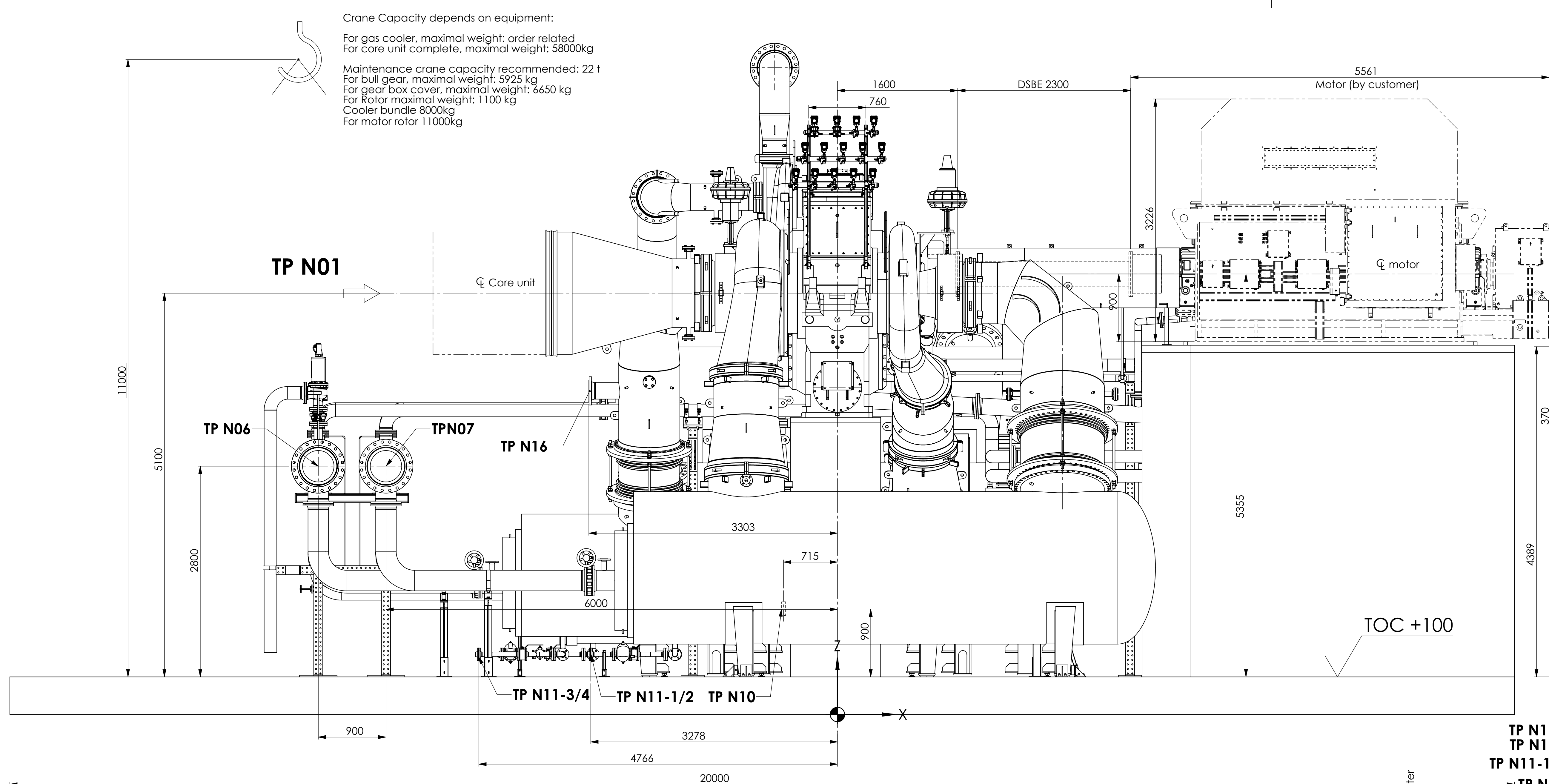
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4	Refer to mark	(4)	ENGMHM	26-09-2023	ENGLDX	26-09-2023
REV	Revision Text:		Rev Drawn by:	Rev Drawn Date:	Rev Approved by:	Rev Approved Date:



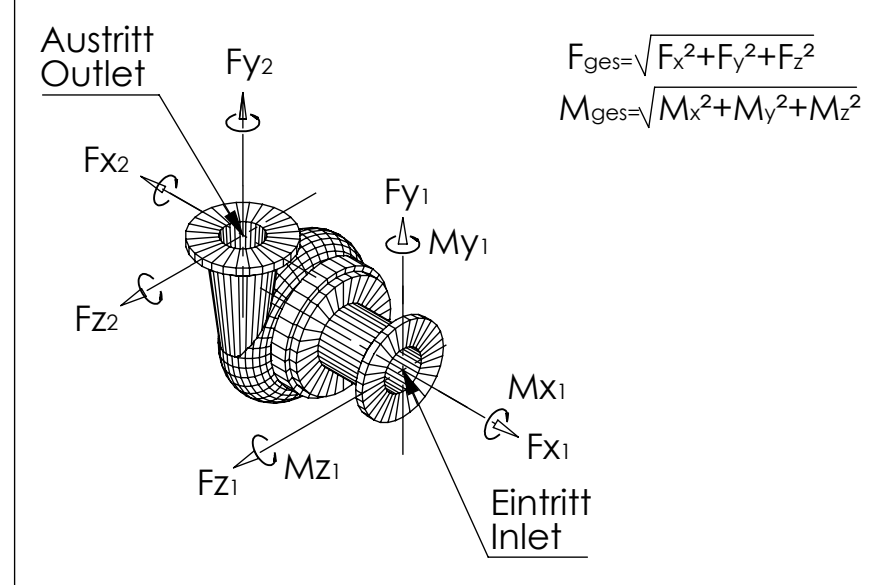
Crane Capacity depends on equipment:
For gas cooler, maximal weight: order related
For core unit complete, maximal weight: 58000kg
Maintenance crane capacity recommended: 22 t
For bull gear, maximal weight: 5925 kg
For gear box cover, maximal weight: 6650 kg
For Rotor maximal weight: 1100 kg
Cooler bundle 8000kg
For motor rotor 11000kg



POS.	DESCRIPTION	ALLOWABLE PIPE FORCES		DISPLACEMENTS		
		F _t [N]	M _t [Nm]	x [mm]	y [mm]	z [mm]
TP N01	Gas inlet Ø 1626	8000	4400	n.a.	n.a.	n.a.
TP N02	Gas outlet DN600 / PN40	46100	76800	1.1 mm	+0.5 mm	0.4 mm
TP N16	Intermediate Blow Off	*	*	0.6 mm	0.4 mm	-0.3 mm

Not applicable. Pipe section between AC TP N16 and Linde points 3-N11538/N01 & FLPWA (AM11) and resulting loads/displacements have been considered in AC piping calculation.

Reference Point



Notes:



The pipes must be connected in a way, that no impermissible stress and vibrations can affect the machine. Instructions included in the Instruction Manual must be followed.

All supports and suspensions must be designed with noise transfer prevention.

Permissible forces and moments occurring at suction and discharge nozzles are determined based on NEMA SM 23.

The user is obliged to execute or treat (e.g. paint) the surface, on which the machine will be erected, in a way that material harmful to water cannot enter the ground.

The machine must only be transported by attaching to hoisting eyebolts provided for this purpose at appropriate points during assembly in our factory.

AIR SEPARATION PLANT	
NOVON 40 with RARE GASES	
Plant / Project Description Engineering, Procurement, Construction and Commissioning Contract Air Separation Unit III	
	
	
Project Name:	Block ASU 3
Project No:	1510 CD77
Equipment No:	C1161 A/B
LINDE Doc No:	&VD-1161-M-ZA1001.001 (EN)
Client Doc No:	

Customer Connections (incl. counter flanges , boltings & gaskets)			
Pos.	Description	Size	Connection
TP N01	Gas inlet with rubber expansion joint	Ø 1626	Pipe CS
TP N02	Gas outlet	DN600 / PN40	EN 1092-1, B1, Type11
TP N03-1 TP N03-2	Check valve	DN500 / PN40	water type
TP N04-1 TP N04-2	Blow off valve	DN300 / PN40	EN 1092-1, B1, Type11
TP N05-1 TP N05-2	Perforated Disc	DN600 / PN40	-
TP N06	Cooling water inlet	DN500 / PN16	EN 1092-1, B1, Type11
TP N07	Cooling water outlet	DN500 / PN16	EN 1092-1, B1, Type11
TP N08-1	Water inlet Motor	DN80 / PN10	EN 1092-1, B1, Type11
TP N08-2	Water outlet Motor	DN80 / PN10	EN 1092-1, B1, Type11
TP N08-3	Oil inlet Motor	DN25 / PN16	EN 1092-1, B1, Type11
TP N08-4	Oil outlet Motor	DN80 / PN16	EN 1092-1, B1, Type11
TP N09	Oil demister (to safe atmosphere) with pipe coupling	DN80 / PN16	EN 1092-1, B1, Type11
TP N10	Instrument header	DN50 / PN16	EN 1092-1, B1, Type11
TP N11-1 TP N11-3 TP N11-5 TP N11-7 TP N11-9	Condensate trap IC1 - IC5	DN50 / PN16	EN 1092-1, B1, Type11
TP N11-2 TP N11-4 TP N11-6 TP N11-8 TP N11-10	Bypass condensate trap IC1 - IC5	DN50 / PN16	EN 1092-1, B1, Type11
TP N12	Oil filling	DN80 / PN16	EN 1092-1, B1, Type11
TP N13	Oil drain connection (oil reservoir)	DN50 / PN16	EN 1092-1, B1, Type11
TP N14	Oil Conditioner Return	DN25 / PN16	EN 1092-1, B1, Type11
TP N15	Oil Conditioner Suction	DN25 / PN16	EN 1092-1, B1, Type11
TP N16	Intermediate blow off valve	DN200 / PN10	EN 1092-1, B1, Type11

Project No.	531 3 8976
Project Name:	Block MAC
Maschine typ:	GT087L5K1

Tolerances, if not indicated, according to ATLAS COPCO STANDARD/Class 1	Machined surface 1350K/	Confidentiality Class acc. to 1102 K	General tolerances: 1350-m
Description:	General Arrangement		

Material:	Sheet No. ENGARW	Checked by: ENGRCR	Approved by: ENGTN	Drawing Owner: ENG
From: 22-08-2022	From: 22-08-2022	From: 23-08-2022	From: 26-08-2022	

Transferred from:	Sheet No. 001	Final weight: 0.01	Sheet format: A0	Scale: 1:30	Current sheet/Total sheets: 2 / 2
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* Connecting lines to motor are designed flexible using pipe coupling and will be adjusted on site during installation.

P&I Diagram	G-001632110	&VD (3-1161) P-FW 1001 (EN)
Foundation Plan	G-001621242	&VD (3-1161) C-ZB 1001 (EN)