Base Load Power Hub (BLPH)

INSTRUMENT AIR PACKAGE
EQUIPMENT DATA SHEETS
INCLUDING MOTORS, AIR COMPRESSOR, DRYERS, ETC.

Document Number: 1724000428-MAC-DS-00011

Document Class: 2

Rev.	Date	Description	Prepared	Reviewed	Approved
04	01/04/2025	Accepted for Construction (AFC)	GT	MC	TM
03	03/02/2025	Accepted for Construction (AFC)	GT	MC	TM
02	17/12/2024	Issue for Review (IFR)	GT	MC	TM
01	10/05/2024	Issue for Review (IFR)	GT	MC	TM
00	28/03/2024	Issue for Review (IFR)	GT	MC	TM

COES

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coes	CLIENTE CUSTOMER	:	ROSETTI MARINO	COMM: JOB:	:	166/24		
	RIFERIMENTO REFERENCE	:	CROSSWIND	UNITA' ITEM	:	/		
	IMPIANTO DRYING UNIT	:	INSTRUMENT AIR PACKAGE	FOGLIO N° SHEET	:	1	DI : OF	5

FOGLIO DATI PER COMPRESSORE
COMPRESSOR DATA SHEET

		DATI GENERALI **GENERAL DATA**		
1	QUANTITA' QUANTITY	:	2x100%	
2	ITEM TAG	:	K-63001A / K-63001B	
3	SERVIZIO SERVICE	:	PLANT AIR FOR DRYER AND NITROGEN GENERATOR	
4	TIPO TYPE	:	ROTARY SCREW	
5	CARATTERISTICHE FEATURES	:	OIL-FREE	
		DATI FUNZIONALI **FUNCTIONAL DATA**		
6	INSTALLAZIONE INSTALLATION	:	OUTDOOR	
7	MOSSO DA DRIVEN BY	:	ELECTRIC MOTOR	
8	POTENZA MOTORE MOTOR POWER	:	55 kW	
9	POTENZA TOTALE TOTAL POWER	:	65.9 kW	
10	TENSIONE DI ALIMENTAZIONE POWER SUPPLY	:	400 V	3 Ph + PE 50 Hz
11	PRESSIONE ARIA IN MANDATA DISCHARGE AIR PRESSURE	:	9.5 barg	
12	PORTATA ARIA IN MANDATA DISCHARGE AIR FLOWRATE	:	415 Sm^3/h	
13	TEMPERATURA ARIA IN MANDATA DISCHARGE AIR TEMPERATURA	:	35 °C	
14	GRADO DI PROTEZIONE PROTECTION DEGREE	:	IP 55	
15	CLASSIFICAZIONE AREA AREA CLASSIFICATION	:	SICURA SAFE	
16				
17		**DATI MOTORE** **MOTOR DATA**		
18	TIPO TYPE	:	SQUIRREL CAGE MOTOR	
19	RAFFREDDAMENTO METHOD OF COOLING	:	AIRCOOLED	
20	ISOLAMENTO INSULATION	:	CLASS F	
21	STANDARD - CLASS	:	IEC - IE4	
22	SAFETY FACTOR	:	1.32	
23	DUTY TYPE	:	S1	
24	SPEED	:	2980 RPM	
25	**NOTES**			
26	COSTRUTTORE MANUFACTURER	:	ATLAS COPCO	
27	MODELLO MODELLO	:	ZT55-10.50-400D	
28	RUMOROSITA' NOISE LEVEL	:	76 dB(A)	
29	PED INFO	:	N/A	

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01	ISSUE FOR REVIEW	GT	TM	09-May-24
00	ISSUE FOR REVIEW	GT	TM	28-Mar-24

coes	CLIENTE / CUSTOMER	: ROSETTI MARINO	COMM: / JOB:	: 166/24	
	RIFERIMENTO / REFERENCE	: CROSSWIND	UNITA' / ITEM	: /	
	IMPIANTO / DRYING UNIT	: INSTRUMENT AIR PACKAGE	FOGLIO N° / SHEET	: 2	DI : 5 / OF

FOGLIO DATI PER PRE-FILTRO
PRE-FILTER DATA SHEET

DATI GENERALI
GENERAL DATA

1	QUANTITA' / QUANTITY	:	2
2	ITEM / TAG	:	S-63001A/B
3	SERVIZIO / SERVICE	:	WATER AND DUST REMOVING
4			

DATI PROGETTO CALDARERIA
VESSELS DESIGN DATA

5	PRESSIONE PROGETTO / DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO / DESIGN TEMPERATURE	:	-10 / +90 °C
6	MATERIALE / MATERIAL	:	SS 316/316L	SOVRASPESS. CORROSIONE / CORROSION OVER-THICKNESS	:	/
7	NORMATIVA PROGETTO / DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO / INSPECTION CODE	:	2014/68/EU PED (CAT. I)

DATI FUNZIONALI
FUNCTIONAL DATA

8	GAS DA TRATTARE / GAS TO BE TREATED	:	OIL FREE AIR	PORTATA IN INGRESSO / INLET FLOWRATE	:	415 Sm^3/h
9	PRESSIONE DI ESERCIZIO / OPERATING PRESSURE	:	9.5 barg	TEMPERATURA DI ESERCIZIO / OPERATING TEMPERATURE	:	35 °C
10	PERDITA DI CARICO/FILTRO PULITO / PRESSURE DROP/CLEAN FILTER	:	0.1 bar	PERDITA DI CARICO/FILTRO SPORCO / PRESSURE DROP/DIRTY FILTER	:	0.3 bar
11	EFFICIENZA / EFFICIENCY	:	99.9 %	GRADO DI FILTRAZIONE / FILTRATION DEGREE	:	3 µm
12	OLIO RESIDUO / RESIDUAL OIL	:	N/A			
13						

CARATTERISTICHE ELEMENTI FILTRANTI
FILTRATION ELEMENTS DATA

14						
15	TIPO ELEMENTO FILTRANTE / FILTRATION ELEMENT TYPE	:	CARTRIDGE	MATERIALE / MATERIAL	:	COALESCING MICROFIBER
16	N° CARTUCCE PER FILTRO / No. OF ELEMENTS/EACH FILTER	:	1	MODELLO / MODEL	:	60A

STRUMENTI - ACCESSORI
INSTRUMENTS - ACCESSORIES

17	☐	BY-PASS FILTRO / FILTER BY-PASS						
18	☒	TUBAZIONE DI RACCORDO FILTRO / CONNECTION PIPE TO FILTER						
19	☒	VALVOLE INTERCETTAZIONE / ON/OFF VALVES	☒	2 VIE / 2-WAY	☐	3 VIE / 3-WAY	☐	AUTOMATICHE / AUTOMATIC
20	☐	MANOMETRO DIFFERENZIALE / DIFFERENTIAL PRESSURE GAUGE						
21	☒	TRASMETTITORE DI PRESSIONE DIFFERENZIALE / DIFFERENTIAL PRESSURE TRANSMITTER	AS PER P&ID No. 1724000428-PR-PID-00019					
22	☒	VALVOLA DI DRENAGGIO / DRAIN VALVE						
23	☒	SCARICATORE DI CONDENSA / STEAM TRAP			☐	AUTOMATICO / AUTOMATIC	☒	GALLEGGIANTE / FLOATING
24	☐	VALVOLE DI SICUREZZA / SAFETY VALVES						

NOTE / REMARKS :
- SAFE AREA
- UNPAINTED

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coes	CLIENTE / CUSTOMER	:	ROSETTI MARINO	COMM: / JOB:	:	166/24	
	RIFERIMENTO / REFERENCE	:	CROSSWIND	UNITA' / ITEM	:	/	
	IMPIANTO / DRYING UNIT	:	INSTRUMENT AIR PACKAGE	FOGLIO N° / SHEET	:	3	DI : 5 / OF

FOGLIO DATI PER ESSICCATORE
DRYER DATA SHEET

DATI GENERALI
GENERAL DATA

1	QUANTITA' / QUANTITY	:	2 + 2	
2	ITEM / TAG	:	D-63001A/B & D-63002A/B	
3	SERVIZIO / SERVICE	:	AIR DRYER	
4	TIPO / TYPE	:	HEATLESS	

DATI PROGETTO MECCANICO
MECHANICAL DESIGN DATA

5	PRESSIONE PROGETTO SERBATOI / VESSELS DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO SERBATOI / VESSELS DESIGN TEMPERATURE	:	-10 / +90 °C
6	MATERIALE SERBATOI / VESSELS MATERIAL	:	SS 316/316L	SOVRASPESS. CORROSIONE SERBATOI / VESSELS CORROSION OVER-THICKNESS	:	/
7	NORMATIVA PROGETTO SERBATOI / VESSELS DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO SERBATOI / VESSELS INSPECTION CODE	:	2014/68/EU PED (CAT. IV)
8						

DATI FUNZIONALI
FUNCTIONAL DATA

9	PORTATA ARIA IN INGRESSO / INLET AIR FLOWRATE	:	415	Sm^3/h
10	PRESSIONE DI ESERCIZIO / OPERATING PRESSURE	:	9.4	barg
11	TEMPERATURA DI ESERCIZIO / OPERATING TEMPERATURE	:	35	°C
12	PUNTO DI RUGIADA IN INGRESSO / INLET DEW POINT	:	35	°C
13	TIPO MATERIALE ADSORBENTE / DESICCANT MATERIAL TYPE	:	ACTIVATED ALUMINA	
14	QUANTITA' ADSORBENTE PER TORRE / DESICCANT QUANTITY/EACH TOWER	:	60	kg
15	PORTATA ARIA IN USCITA / OUTLET AIR FLOWRATE	:	350	Sm^3/h
16	PUNTO DI RUGIADA IN USCITA / OUTLET DEW POINT	:	-40	°C
17	POTENZA TOTALE INSTALLATA / TOTAL DEMANDE RATE	:	0.05	kW
18	PERDITA DI CARICO / PRESSURE DROP	:	0.2	bar
19	DURATA CICLO / LENGHT OF CYCLE	:	5+5	min
20	PRESSIONE IN USCITA / OUTLET PRESSURE	:	9.2	barg
21	CONSUMO kWh PER RIGENERAZIONE / kWh CONSUMPTION/EACH REGENERATION	:	/	
22	TENSIONE DI ALIMENTAZIONE / SUPPLY VOLTAGE	:	24 VDC	AUX.
23	GRADO DI PROTEZIONE / PROTECTION DEGREE	:	IP 65	
24	CLASSIFICAZIONE AREA / AREA CLASSIFICATION	:	SAFE	
25	RUMOROSITA' / NOISE LEVEL	:	85dB(A) max PRESSURE LEVEL at 1 m	
26				

NOTE / REMARKS :
- SAFE AREA
- UNPAINTED
- INSTRUMENTATION AS PER P&ID No. 1724000428-PR-PID-00019

REV. / REV.	DESCRIZIONE / DESCRIPTION	EMESSO / ISSUED	APPROVATO / APPROVED	DATA / DATE
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coes	CLIENTE / CUSTOMER	: ROSETTI MARINO	COMM: / JOB:	: 166/24	
	RIFERIMENTO / REFERENCE	: CROSSWIND	UNITA' / ITEM	: /	
	IMPIANTO / DRYING UNIT	: INSTRUMENT AIR PACKAGE	FOGLIO N° / SHEET	: 4	DI : 5 OF

FOGLIO DATI PER POST-FILTRO
AFTER-FILTER DATA SHEET

DATI GENERALI
GENERAL DATA

1	QUANTITA' / QUANTITY	:	2
2	ITEM / TAG	:	S-63002A/B
3	SERVIZIO / SERVICE	:	DUST REMOVING
4			

DATI PROGETTO CALDARERIA
VESSELS DESIGN DATA

5	PRESSIONE PROGETTO / DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO / DESIGN TEMPERATURE	:	-10 / +90 °C
6	MATERIALE / MATERIAL	:	SS 316/316L	SOVRASPESS. CORROSIONE / CORROSION OVER-THICKNESS	:	/
7	NORMATIVA PROGETTO / DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO / INSPECTION CODE	:	2014/68/EU PED (CAT. I)

DATI FUNZIONALI
FUNCTIONAL DATA

8	GAS DA TRATTARE / GAS TO BE TREATED	:	OIL FREE AIR	PORTATA IN INGRESSO / INLET FLOWRATE	:	350 Sm^3/h
9	PRESSIONE DI ESERCIZIO / OPERATING PRESSURE	:	9.2 barg	TEMPERATURA DI ESERCIZIO / OPERATING TEMPERATURE	:	35 °C
10	PERDITA DI CARICO/FILTRO PULITO / PRESSURE DROP/CLEAN FILTER	:	0.1 bar	PERDITA DI CARICO/FILTRO SPORCO / PRESSURE DROP/DIRTY FILTER	:	0.3 bar
11	EFFICIENZA / EFFICIENCY	:	99.9 %	GRADO DI FILTRAZIONE / FILTRATION DEGREE	:	3 µm
12	OLIO RESIDUO / RESIDUAL OIL	:	N/A			
13						

CARATTERISTICHE ELEMENTI FILTRANTI
FILTRATION ELEMENTS DATA

14						
15	TIPO ELEMENTO FILTRANTE / FILTRATION ELEMENT TYPE	:	CARTRIDGE	MATERIALE / MATERIAL	:	COALESCING MICROFIBER
16	N° CARTUCCE PER FILTRO / No. OF ELEMENTS/EACH FILTER	:	1	MODELLO / MODEL	:	60A

STRUMENTI - ACCESSORI
INSTRUMENTS - ACCESSORIES

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18	☒	TUBAZIONE DI RACCORDO FILTRO / CONNECTION PIPE TO FILTER						
19	☒	VALVOLE INTERCETTAZIONE / ON/OFF VALVES	☒	2 VIE / 2-WAY	☐	3 VIE / 3-WAY	☐	AUTOMATICHE / AUTOMATIC
20	☐	MANOMETRO DIFFERENZIALE / DIFFERENTIAL PRESSURE GAUGE						
21	☒	TRASMETTITORE DI PRESSIONE DIFFERENZIALE / DIFFERENTIAL PRESSURE TRANSMITTER	AS PER P&ID No. 1724000428-PR-PID-00019					
22	☒	VALVOLA DI DRENAGGIO / DRAIN VALVE						
23	☐	SCARICATORE DI CONDENSA / STEAM TRAP			☐	AUTOMATICO / AUTOMATIC	☐	GALLEGGIANTE / FLOATING
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coes	CLIENTE / CUSTOMER	:	ROSETTI MARINO	COMM: / JOB:	: 166/24
	RIFERIMENTO / REFERENCE	:	CROSSWIND	UNITA' / ITEM	: /
	IMPIANTO / DRYING UNIT	:	INSTRUMENT AIR PACKAGE	FOGLIO N° / SHEET	: 5 DI : 5 OF

FOGLIO DATI PER SERBATOIO
PRESSURE VESSEL DATA SHEET

DATI PROGETTO MECCANICO
MECHANICAL DESIGN DATA

1	QUANTITA' / QUANTITY	:	1			
2	ITEM / TAG	:	V-63001			
3	SERVIZIO / SERVICE	:	SERBATOIO ARIA SECCA / DRY AIR VESSEL	TIPO / TYPE	:	VERTICALE / VERTICAL
4	MATERIALE / MATERIAL	:	SA 516 Gr.70	SPESSORE VIROLA / SHELL THICKNESS	:	18 mm
5	TIPO FONDI / HEAD TYPE	:	ELLIPTICAL 2:1	SPESSORE FONDI / HEAD THICKNESS	:	18 mm (15.3 mm M.A.F.)
6	NORMATIVA PROGETTO / DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO / INSPECTION CODE	:	2014/68/EU PED (CAT. IV)
7				SOVRASPESS. CORROSIONE / CORROSION OVER-THICKNESS	:	1.5 mm
8	PRESSIONE PROGETTO / DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO / DESIGN TEMPERATURE	:	-10 / +90 °C
9	DIAMETRO ESTERNO / EXTERNAL DIAMETER	:	2500 mm	LUNGHEZZA T/T / T/T LENGHT	:	4026 mm
10	VOLUME / VOLUME	:	23 m^3			
11	RADIOGRAFIE / RT TEST	:	☒ YES SPOT ☐ NO			
12	VERNICIATURA / PAINTING	:	☒ EXTERNAL ☐ INTERNAL ACC. TO 1724000428-MAT-PRO-00022			
13	ZINCATURA / GALVANIZING	:	☐ YES ☒ NO			
14	NOTE / NOTES	:	FURTHER DETAILS (FASTENERS, GASKETS, ETC.) INCLUDED IN SECTIONAL DRAWING			

ELENCO CONNESSIONI
NOZZLES LIST

	SIGLA / TAG	DIAMETRO / DIAMETER	TIPO / TYPE	SERIE / RATING	SERVIZIO / SERVICE	NOTE / REMARKS
15						
16	A1	3"	WN	ANSI 150	SAFETY VALVE	ASME B16.5
17	A2	1"	WN	ANSI 150	DRAIN	ASME B16.5
18	A3	1"	WN	ANSI 150	VENT	ASME B16.5
19	A4	1/2"	NPT	6000#	PRESSURE GAUGE	
20	A5	1/2"	NPT	6000#	PRESSURE TRANSMITTER	
21	A6	1.1/2"	WN	ANSI 150	TEMPERATURE GAUGE	ASME B16.5
22	A7	1.1/2"	WN	ANSI 150	TEMPERATURE TRANSMITTER	ASME B16.5
23	A8	2"	WN	ANSI 150	PROCESS IN/OUT	ASME B16.5
24	A9	24"	WN	ANSI 150	MAN HOLE	ASME B16.5

STRUMENTI - ACCESSORI
INSTRUMENTS - ACCESSORIES

25	☒ VALVOLA DI SICUREZZA / SAFETY VALVE
26	☒ MANOMETRO / PRESSURE GAUGE
27	☒ TRASMETTITORE DI PRESSIONE / PRESSURE TRANSMITTER
28	☒ TERMOMETRO / TEMPERATURE GAUGE
29	☒ TRASMETTITORE DI TEMPERATURA / TEMPERATURE TRANSMITTER
30	☒ VALVOLA DI DRENAGGIO MANUALE / MANUAL DRAIN VALVE
31	☒ SCARICATORE DI CONDENSA / DRAIN TRAP
32	

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