

Design and installation of venting system and piping by specialized company.

The warmed up outgoing air must be led out through a conduit in a certain direction

Louvre for incoming air package/ thermostatically controlled

Louvre for incoming / outgoing air with weather protective lattice

Louvre for outgoing/ recirculation air thermostatically controlled

Condensate lines have to be connected to a collecting line via swan neck or are to be fed to the condensate treatment system separately. A pressure-less drain has to be provided for.

ATTENTION!

Minimum width of door = total width of component + 100 mm

This drawing also contains work to be done on site. The regulations of EN 1012 and national regulations for setting up of power installations equivalent to VDE 0100 and VDE 0105 have to be observed; the requirements of existing operational safety ordinance and the manuals have to be considered by the operator and the employer respectively at the place of installation. The national safety and accident prevention regulations have to be observed. The installation of a sub-assembly in terms of the pressure equipment directive 2014/68/EU has to be carried out according to this directive.

		Documents released by engineering are identified by these characteristics in the title block: Date of review/ release and name of the reviewing/ releasing individual.			
Project No.	00129520	Station Setup ID	157695	Station ID	26353
Status	CONCEPT				
6	CAD released	28.04.2021	Hobusch	Date	Name
5	CAD released	28.04.2021	Hobusch	Drawing	28.04.2021 teubl
4	CAD freigegeben	28.04.2021	Hobusch	Review	28.04.2021 Hobusch
3	CAD frei gegeben	29.01.2021	hobusch	Released	28.04.2021 Hobusch
2	CAD released	26.01.2021	hobusch	Template Rev.	05.03.2019
1	CAD created	18.01.2021	nahhas1		
0		31.05.2016			
				<b>KAESER</b> <b>KOMPRESSOREN</b>	
Rev.	Modification	Date	Name		
				Sketch	Page 2 of 3
				P&I Diagram	PI
				Sketch	C2
				Replaces	Replaced by
				Paper size	DIN A3 / 1:50
				Description	

Technical data see page 3

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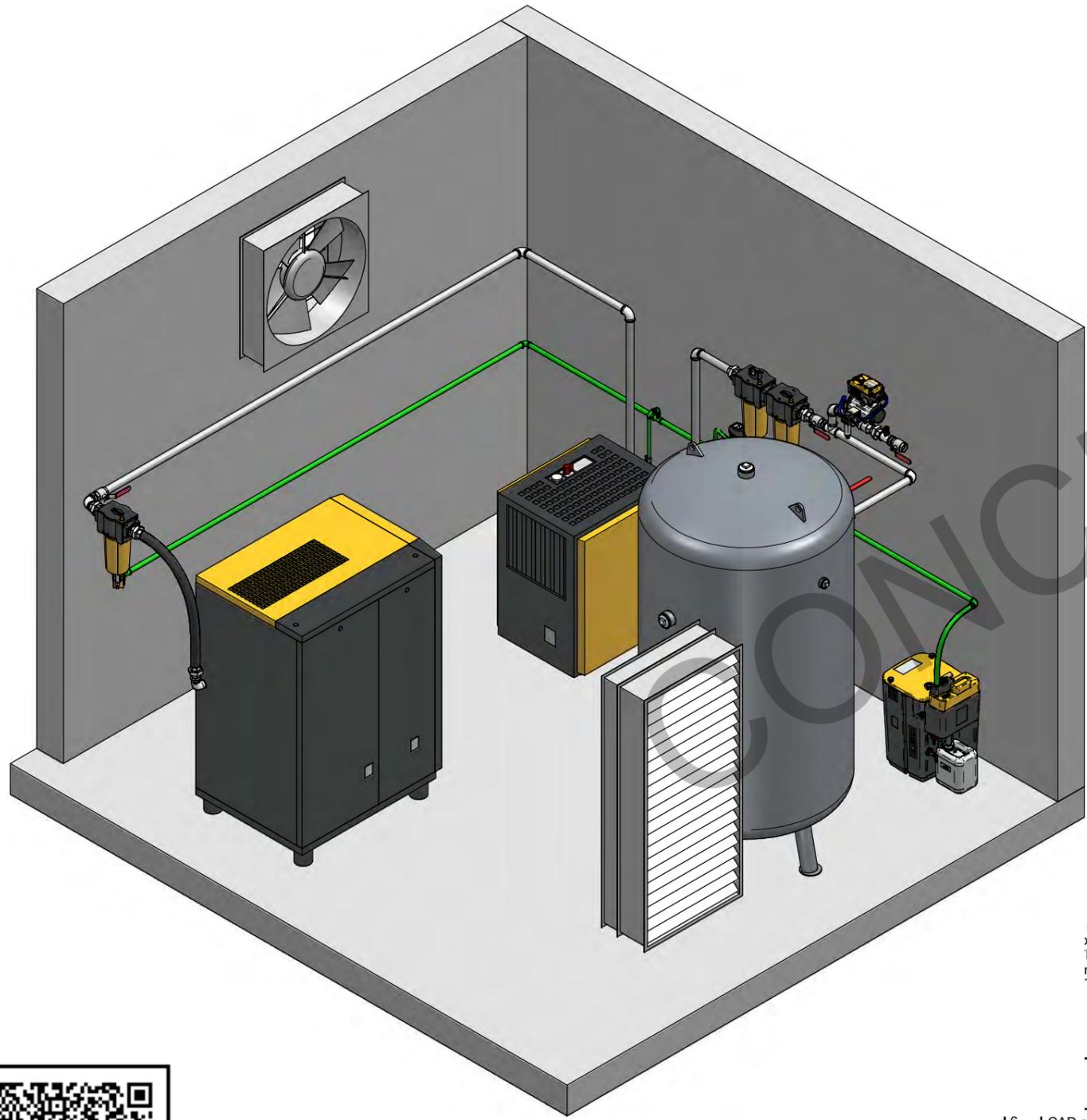


Compressor model	Working pressure [bar(g)]	Compressed air connection	Air entrance aperture free cross section per unit [m <sup>2</sup> ]	Incoming air volume per unit [m <sup>3</sup> /h]	Cyclone separator	Compressed air connection	ECO-DRAIN a)	Refrigeration dryer model	Compressed air connection	Air entrance aperture (free cross section) per unit [m <sup>2</sup> ]	Incoming air volume per unit [m <sup>3</sup> /h]	Exhaust air fan (thermostatically controlled) [m <sup>3</sup> /h]	Filter Extra	Compressed air connection	ECO-DRAIN a)	Filter Adsorption	Compressed air connection	Air receiver [l]	Compressed air connection	Air main charging system	Compressed air connection	Condensate treatment system AQUAMAT a)
ASK 28	8	G 1 1/4	0.5	6170	F 46 KC	G 1 1/4	31	TC 31	G 1 1/4	0.2	2380	8380	F 46 KE	G 1 1/4	31 F	F 46 KA	G 1 1/4	900	2x G 2; 2x G 1 1/2	DHS 4.0 32G	G 1 1/4	CF 6
ASK 34	8	G 1 1/4	0.5	7710	F 46 KC	G 1 1/4	31	TC 36	G 1 1/4	0.2	2380	9880	F 46 KE	G 1 1/4	31 F	F 46 KA	G 1 1/4	1000	2x G 2; 2x G 1 1/2	DHS 4.0 32G	G 1 1/4	CF 9
ASK 40	8	G 1 1/4	0.6	9240	F 46 KC	G 1 1/4	31	TC 44	G 1 1/4	0.2	2380	11380	F 46 KE	G 1 1/4	31 F	F 46 KA	G 1 1/4	2000	2x G 2 1/2	DHS 4.0 32G	G 1 1/4	CF 9

a) Designed for reference terms  
DIN ISO 7183 Option A

Design limits for ambient temperature  
min.: + 3° C  
max.: + 25° C

b) Climatic zone 2



1:30

Condensate lines have to be connected to a collecting line via swan neck or are to be fed to the condensate treatment system separately. A pressure-less drain has to be provided for.

Air receiver represents minimum recommended size  
ATTENTION!  
Minimum width of door = total component width + 100 mm

also contains work to be done on site. The regulations of EN 1012 and national regulations for setting up of power installations equivalent to VDE 0100 and VDE 0105 are to be observed; the requirements of existing operational safety ordinance and the manuals have to be considered by the operator and the employer respectively at the place of installation. The national safety and accident prevention regulations have to be observed. The installation of a sub-assembly in terms of the pressure equipment directive 2014/68/EU is to be carried out according to this directive.

Documents released by engineering are identified by these characteristics in the title block:  
Date of review/ release and name of the reviewing/ releasing individual.

00129520 CONCEPT	Station Setup ID	157695	Station ID	26353			
6	CAD released	28.04.2021	Hobusch	Date	Name	Sample planning sketch with exhaust air fan / T max.: + 25 °C /	
5	CAD released	28.04.2021	Hobusch	Drawing	28.04.2021		teubl
4	CAD freigegeben	28.04.2021	Hobusch	Review	28.04.2021		Hobusch
3	CAD frei gegeben	29.01.2021	hobusch	Released	28.04.2021	Hobusch	Oil injected screw compressor shown: 1x ASK 40, 1x TC 44, 1x F 46 KE/KA /
2	CAD released	26.01.2021	hobusch	Template Rev.	05.03.2019		
1	CAD created	18.01.2021	nahhas1				
0		31.05.2016					
Rev.	Modification	Date	Name	Original			



Sketch	Page 3 of 3	Paper size	DIN A3 / 1:50
P&I Diagram	PI	Description	
Sketch	C2		
Replaces		Replaced by	



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Room temperature limitations by design

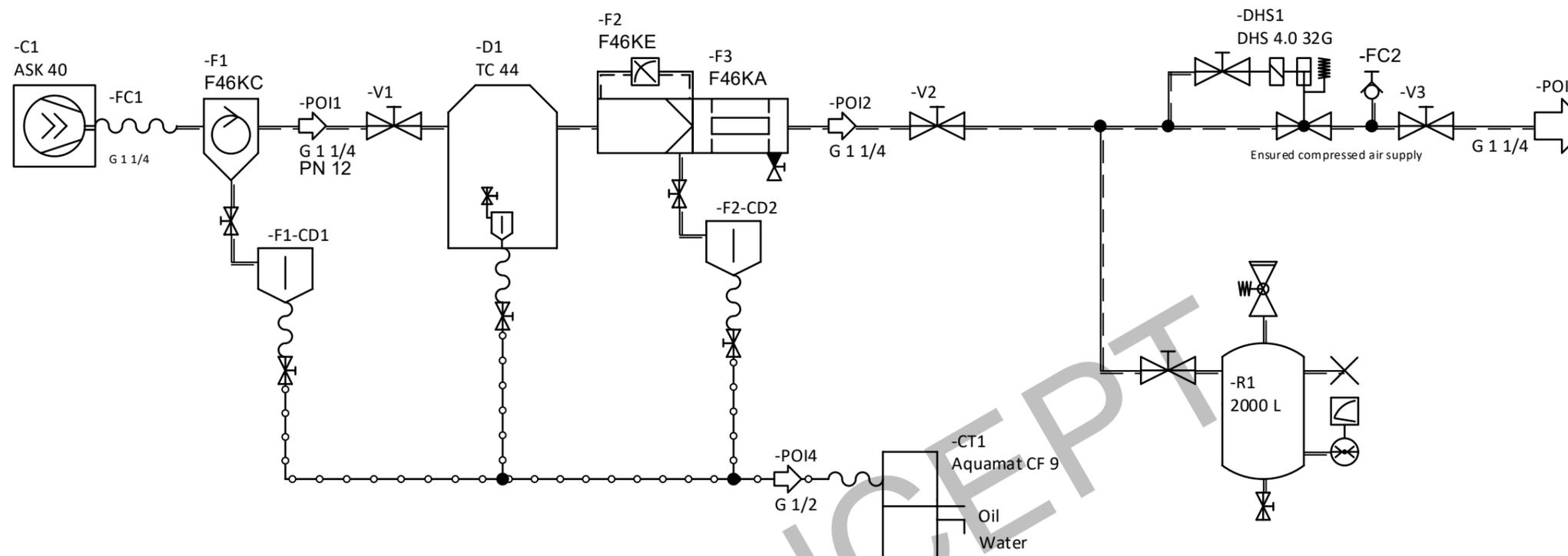
Min. 3.0 °C

Max. 25.0 °C

Piping key

— Compressed air

○—○ Condensate



CONCEPT

Documents released by engineering are identified by these characteristics in the title block

date of review/release

name of the reviewing/ releasing individual

Furthermore, any unreleased documents are identified by this designation: "Draft – for technical clarification only"

Other applicable documents are listed in "Documents overview"

All site work, including but not limited to, site preparation, construction, system component assembly and installation, must be completed in accordance with all relevant local, state and national codes and regulations, including but not limited to, building, electrical and occupational safety. End-users and all sub-contractors responsible for this work may be provided with product information to initiate these tasks, however this is not a substitution for reading and understanding the appropriate Product Manuals prior to installation of the equipment.

Since the compliance with the various federal, state and local laws and regulations concerning occupational health and safety and pollution are affected by the use, installation and operation of Equipment and other matters over which Kaeser has no control, Kaeser assumes no responsibility for compliance with those laws and regulations, whether by way of indemnity, warranty or otherwise.

Compressed air quality class to ISO 8573-1: 2010 (Particle : Water : Oil) when the operational conditions and maintenance specifications are met

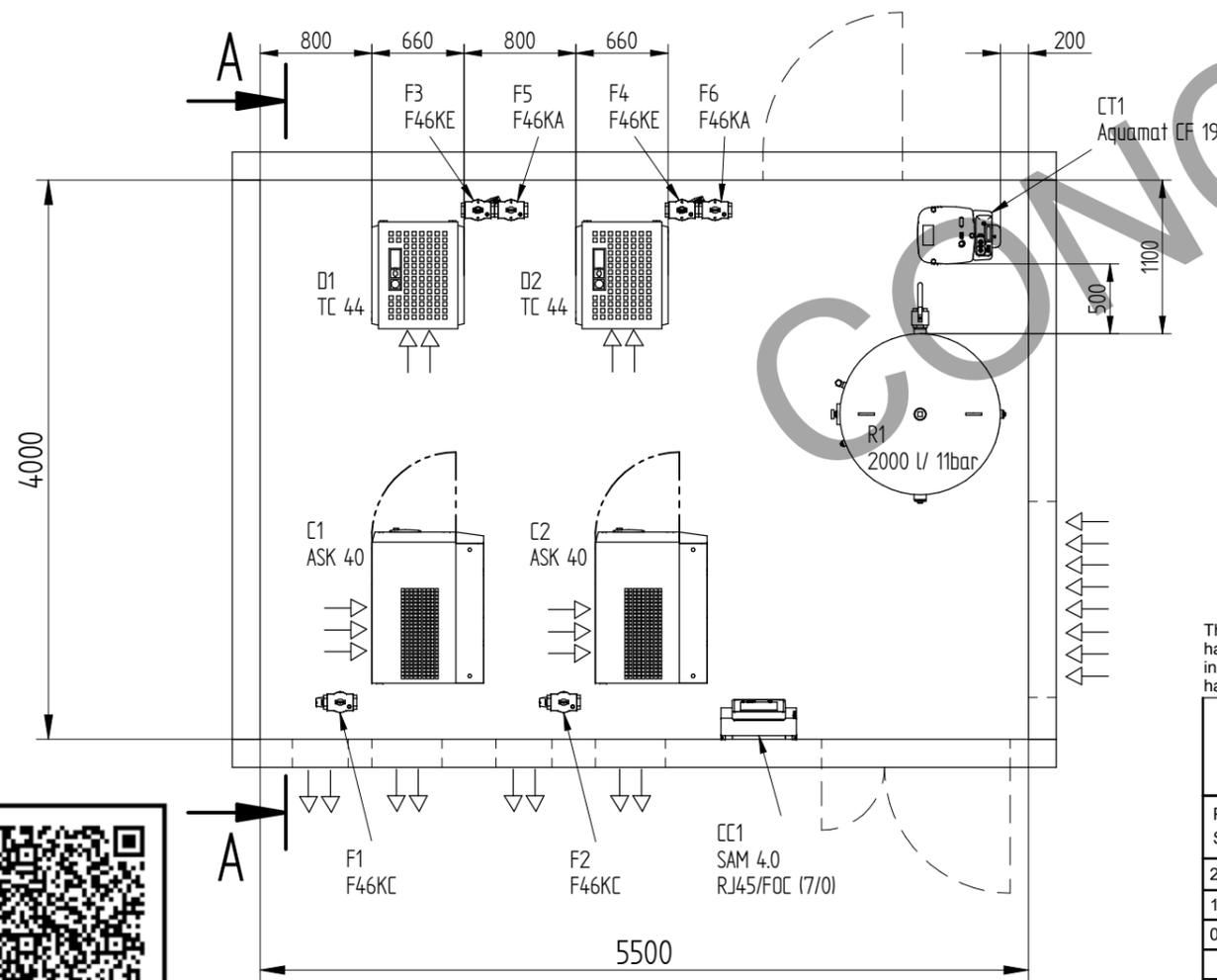
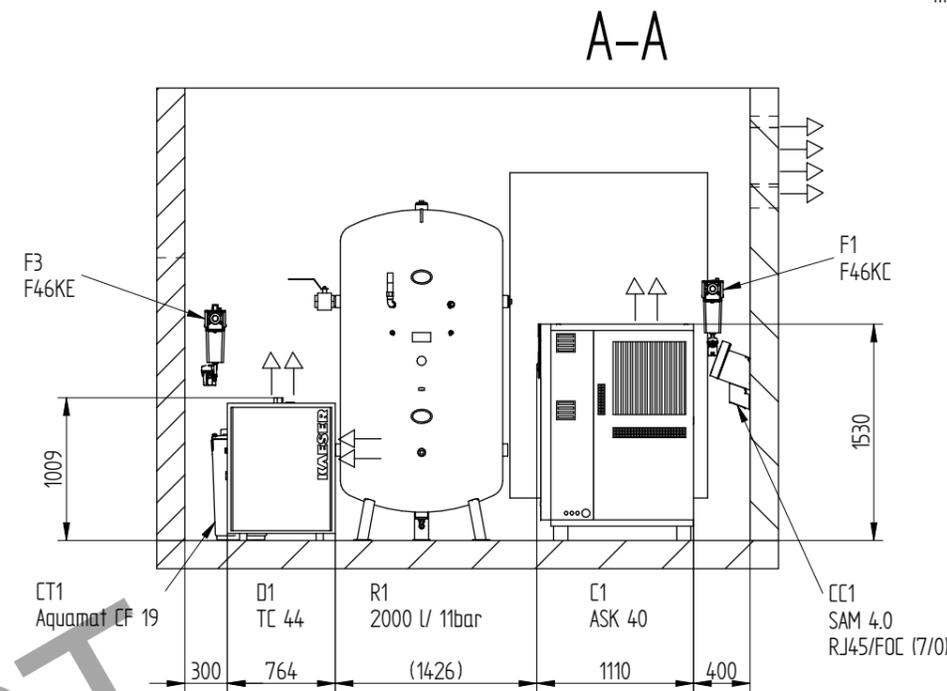
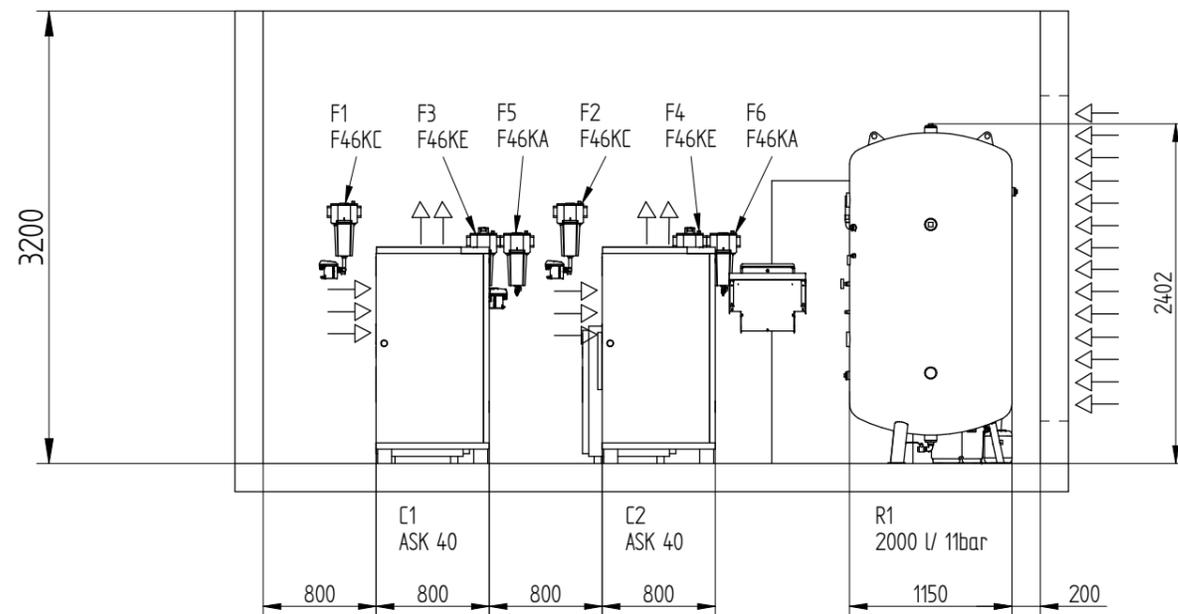
Condensate lines have to be connected to a collecting line via swan neck or are to be fed to the condensate treatment system separately. A pressure-less drain has to be provided for.

In wet areas of the compressed air main all connections have to be built as swan neck from above. Exception: a sidelong connection is possible, if the collective line is at least two pipe sizes larger than the connection. The main has to be installed with a descending gradient and a condensate drain has to be provided at the lowest point.



Project number	00129520	Station setup ID	157695	Station ID	26353		
Status	CONCEPT		Concept 1				
			Date	Name	Sample planning sketch with exhaust air fan / T max.: + 25 °C /  Oil injected screw compressor shown: 1x ASK 40, 1x TC 44, 1x F 46 KE/KA /		
0		5/31/2016	Drawing	4/28/2021		Teubl	
1	CAD created	1/18/2021	nahhas1	Check		Hobusch	
2	CAD released	1/26/2021	hobusch	Approval		4/28/2021	Hobusch
3	CAD frei gegeben	1/29/2021	hobusch				
4	CAD freigegeben	4/28/2021	Hobusch				
5	CAD released	4/28/2021	Hobusch				
6	CAD released	4/28/2021	Hobusch				
Rev.	Change	Date	Name	Orig.			
					Replaces	Replaced by	





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Louvre for incoming air package/ thermostatically controlled

Louvre for incoming / outgoing air with weather protective lattice

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ATTENTION!

Minimum width of door = total width of component + 100 mm

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Project No. 00129396 Status CONCEPT		Station Setup ID 149263		Station ID 26252	
2	CAD released	26.02.2021	hobusch	Date	Name
1	CAD created	24.02.2021	nahhas1	Drawing	25.02.2021 nahhas1
0		31.05.2016		Review	25.02.2021 Hobusch
				Released	25.02.2021 Hobusch
Template Rev. 05.03.2019					
<b>KAESER KOMPRESSOREN</b>					
Sketch		Page 1 of 3		Paper size DIN A3 / 1:50	
P&I Diagram		PI		Description	
Sketch		C2		Replaces	
Replaces		Replaced by			
Rev.	Modification	Date	Name	Original	

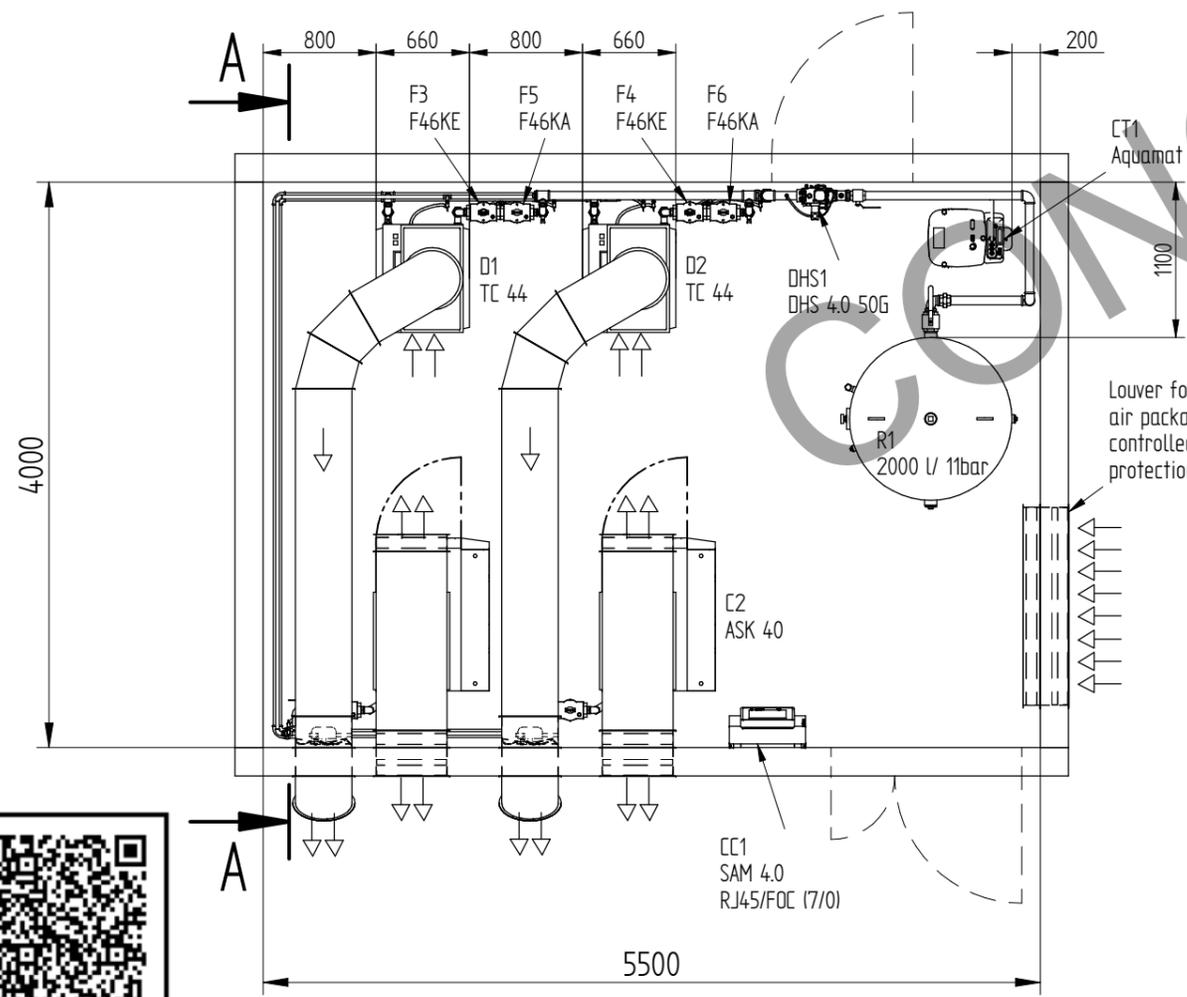
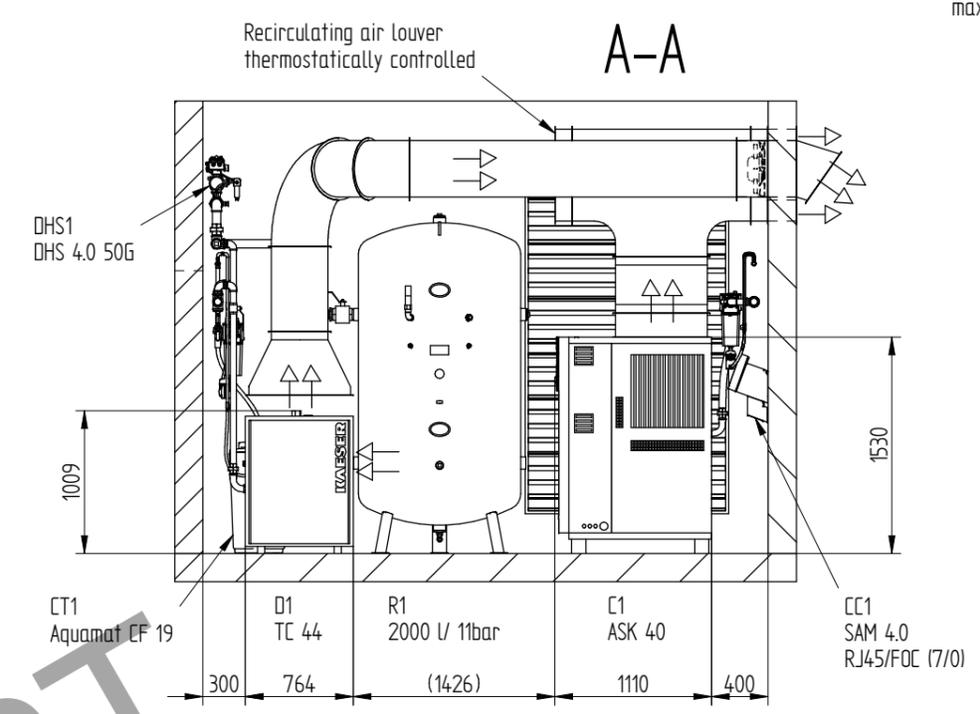
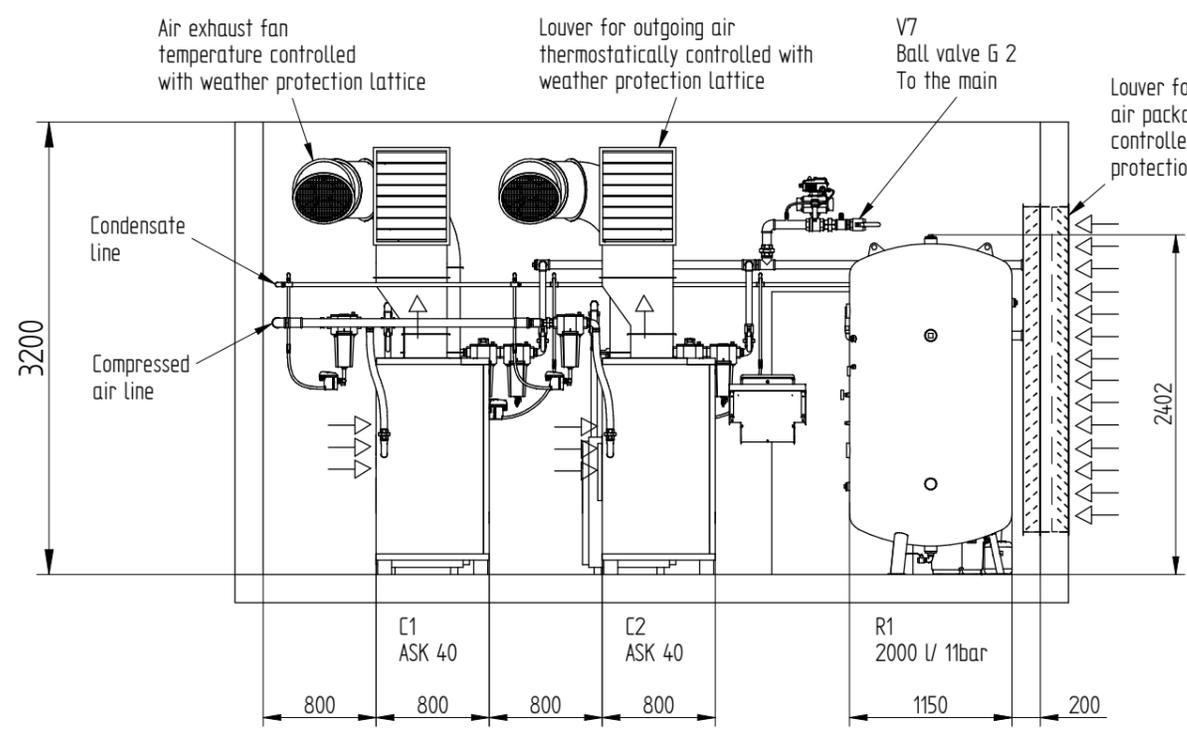
Technical data see page 3



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CONCEPT

Design limits for ambient temperature  
 min: + 3 °C  
 max: + 25 °C



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Louvre for incoming / outgoing air with weather protective lattice

Condensate lines have to be connected to a collecting line via swan neck or are to be fed to the condensate treatment system separately. A pressure-less drain has to be provided for.

ATTENTION!  
 Minimum width of door = total width of component + 100 mm

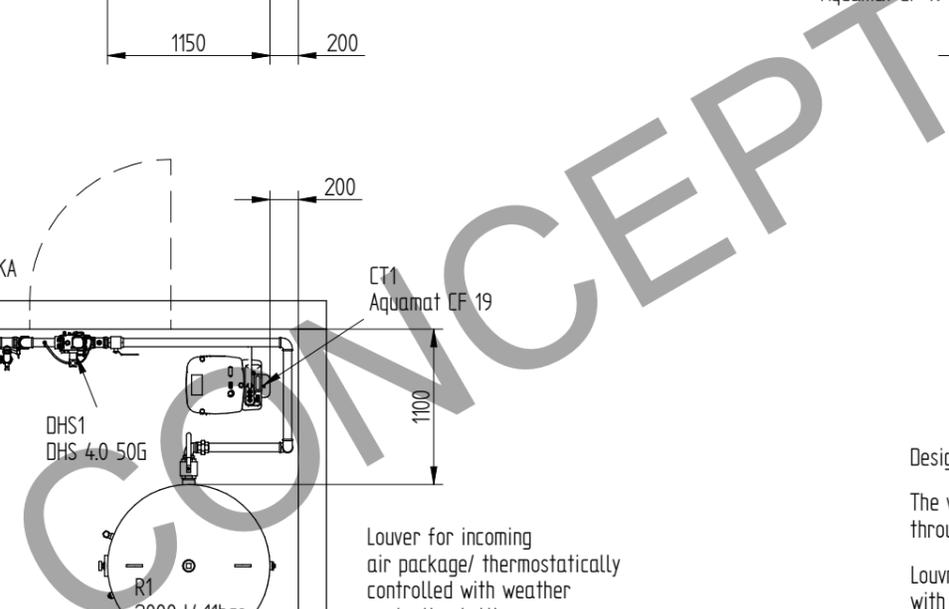
This drawing also contains work to be done on site. The regulations of EN 1012 and national regulations for setting up of power installations equivalent to VDE 0100 and VDE 0105 have to be observed; the requirements of existing operational safety ordinance and the manuals have to be considered by the operator and the employer respectively at the place of installation. The national safety and accident prevention regulations have to be observed. The installation of a sub-assembly in terms of the pressure equipment directive 2014/68/EU has to be carried out according to this directive.

Project No. 00129396		Station Setup ID 149263		Station ID 26252	
Status CONCEPT		Date 25.02.2021		Name nahhas1	
2	CAD released	26.02.2021	hobusch	Date	Name
1	CAD created	24.02.2021	nahhas1	Drawing	nahhas1
0		31.05.2016		Review	Hobusch
				Released	Hobusch
Template Rev. 05.03.2019					
<b>KAESER KOMPRESSOREN</b>					
Sketch		Page 2 of 3		Paper size DIN A3 / 1:50	
P&I Diagram		PI		Description	
Sketch		C2		Replaces	
Replaces		Original		Replaced by	

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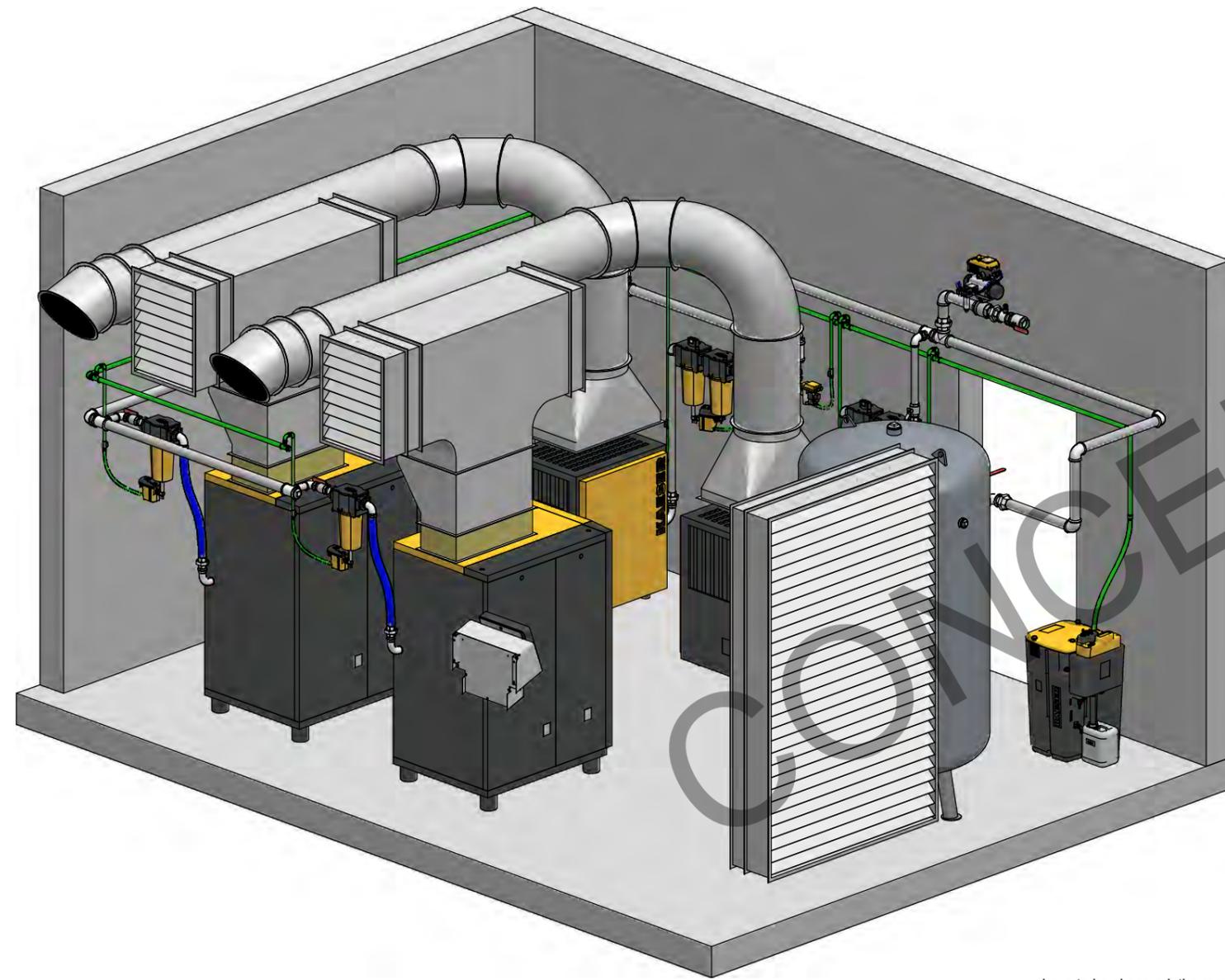


Compressor model	Working pressure [bar(g)]	Compressed air connection	Air entrance aperture free cross section per unit [m <sup>2</sup> ]	Incoming air volume per unit [m <sup>3</sup> /h]	Air exhaust duct dimensions (free cross section) per unit [m <sup>2</sup> ]	Permissible overall pressure loss for exhaust duct per unit [Pa]	Cyclone separator	Compressed air connection	ECO-DRAIN	Compressed air collective line (two units)	Water trap ECO-DRAIN	Refrigeration dryer model	Compressed air connection	Air entrance aperture (free cross section) per unit [m <sup>2</sup> ]	Incoming air volume per unit [m <sup>3</sup> /h]	Exhaust air fan (thermostatically controlled)	Filter Extra	Compressed air connection	ECO-DRAIN	Filter Adsorption	Compressed air connection	Air receiver [l]	Compressed air connection	Control	Air main charging system	Compressed air connection	Condensate treatment system AQUAMAT
ASK 28	8	G 1 1/4	0.5	4170	0.33	60	F 46 KC	G 1 1/4	31	G 2	31	TC 31	G 1 1/4	0.2	2380	2380	F 46 KE	G 1 1/4	31 F	F 46 KA	G 1 1/4	900	2x G 2; 2x G 1 1/2	SAM 4.0	DHS 4.0 50G	G 2	CF 9
ASK 34	8	G 1 1/4	0.5	4210	0.33	60	F 46 KC	G 1 1/4	31	G 2	31	TC 36	G 1 1/4	0.2	2380	2380	F 46 KE	G 1 1/4	31 F	F 46 KA	G 1 1/4	1000	2x G 2; 2x G 1 1/2	SAM 4.0	DHS 4.0 50G	G 2	CF 19
ASK 40	8	G 1 1/4	0.6	5240	0.33	40	F 46 KC	G 1 1/4	31	G 2	31	TC 44	G 1 1/4	0.2	2380	2380	F 46 KE	G 1 1/4	31 F	F 46 KA	G 1 1/4	2000	2x G 2 1/2	SAM 4.0	DHS 4.0 50G	G 2	CF 19

a) Designed for reference terms  
DIN ISO 7183 Option A

Design limits for ambient temperature  
min: + 3° C  
max: + 25° C

b) Climatic zone 2



1:35

Air receiver represents minimum recommended size

ATTENTION!  
Minimum width of door = total width of component + 100 mm

Condensate lines have to be connected to an inclining collecting line via swan neck or are to be fed to the condensate treatment system separately. A pressure-less drain has to be provided for.

Work to be done on site. The regulations of EN 1012 and national regulations for setting up of power installations equivalent to VDE 0100 and VDE 0105 have to be observed; the requirements of existing operational safety ordinance and the manuals have to be considered by the operator and the employer respectively at the place of installation. The national safety and accident prevention regulations have to be observed. The installation of a sub-assembly in terms of the pressure equipment directive 2014/68/EU has to be carried out according to this directive.

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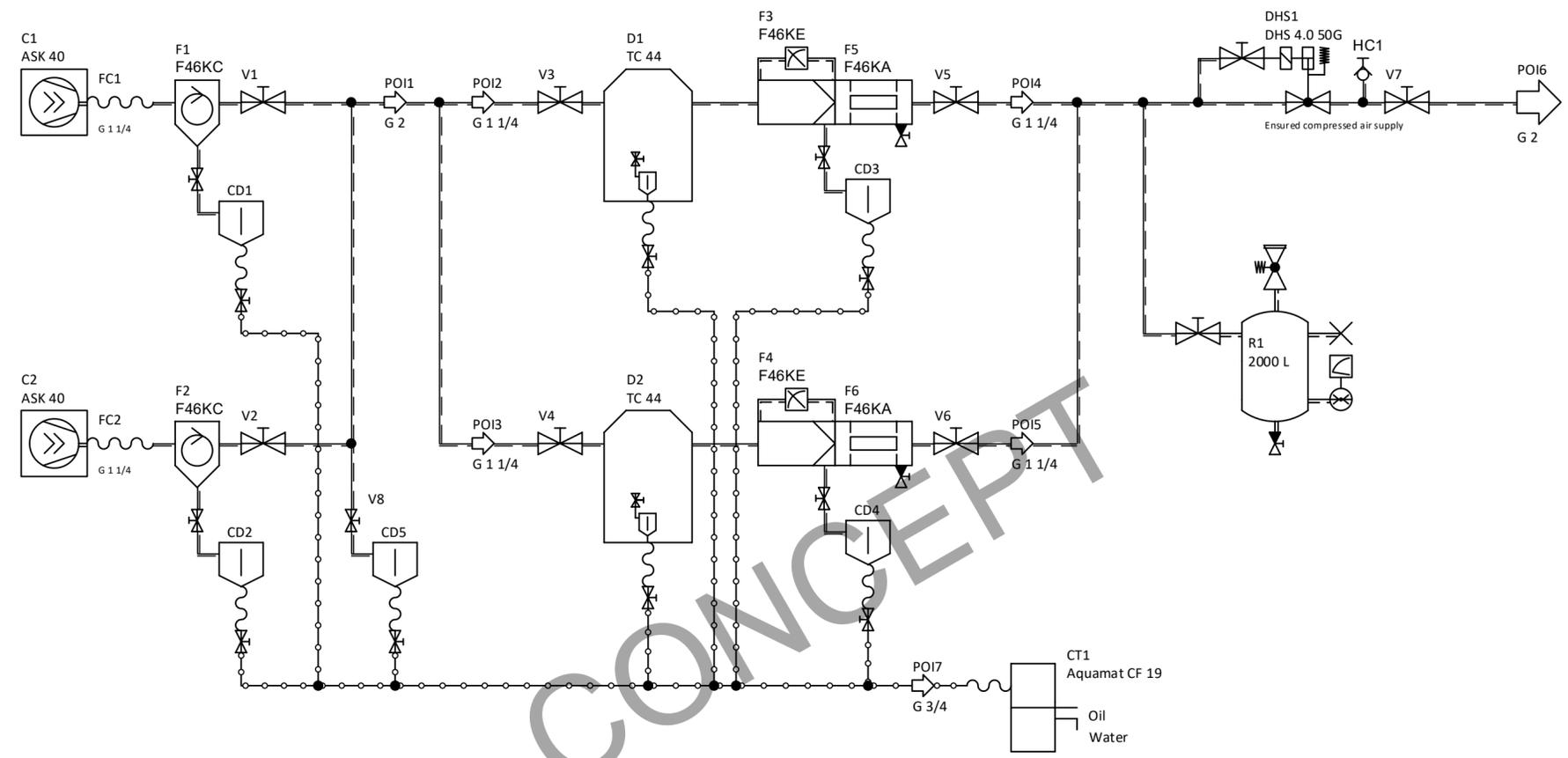


Project No. 00129396		Station Setup ID 149263		Station ID 26252	
Status CONCEPT		Documents released by engineering are identified by these characteristics in the title block: Date of review/ release and name of the reviewing/ releasing individual.			
2	CAD released	26.02.2021	hobusch	Date	Name
1	CAD created	24.02.2021	nahhas1	Drawing	25.02.2021 nahhas1
0		31.05.2016		Review	25.02.2021 Hobusch
				Released	25.02.2021 Hobusch
Template Rev. 05.03.2019					
			<b>KAESER KOMPRESSOREN</b>		
Sketch		Page 3 of 3		Paper size DIN A3 / 1:50	
P&I Diagram		PI		Description	
Sketch		C2		Replaces	
Rev.	Modification	Date	Name	Original	Replaced by

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**Room temperature limitations by design**  
 Min. 3.00 °C  
 Max. 25.00 °C

**Piping key**  
 — Compressed air  
 ○—○ Condensate



CONCEPT



Compressed air quality class to ISO 8573-1: 2010 (Particle : Water : Oil) when the operational conditions and maintenance specifications are met

Condensate lines have to be connected to a collecting line via swan neck or are to be fed to the condensate treatment system separately. A pressure-less drain has to be provided for.

In wet areas of the compressed air main all connections have to be built as swan neck from above. Exception: a sidelong connection is possible, if the collective line is at least two pipe sizes larger than the connection. The main has to be installed with a descending gradient and a condensate drain has to be provided at the lowest point.

Documents released by engineering are identified by these characteristics in the title block

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 name of the reviewing/ releasing individual

Furthermore, any unreleased documents are identified by this designation: "Draft – for technical clarification only"

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Project number	00129396	Station setup ID	149263	Station ID	26252
Status	CONCEPT		Concept 1		
		Date	Name	Sample planning sketch with exhaust air duct / T max.: + 25 °C /	
		2/23/2021	Nahhas1		
			Hobusch	Oil injected screw compressor shown: 2x ASK 40, 2x TC 44, 2x F 46 KE/KA /	
		2/26/2021	Hobusch		
0	5/31/2016			P&I diagram	Sh. Sheet size DIN A2
1	CAD created	2/24/2021	nahhas1	P&I diagram	1 420 x 594 mm
2	CAD released	2/26/2021	hobusch		
Rev.	Change	Date	Name	Orig.	Replaced by



