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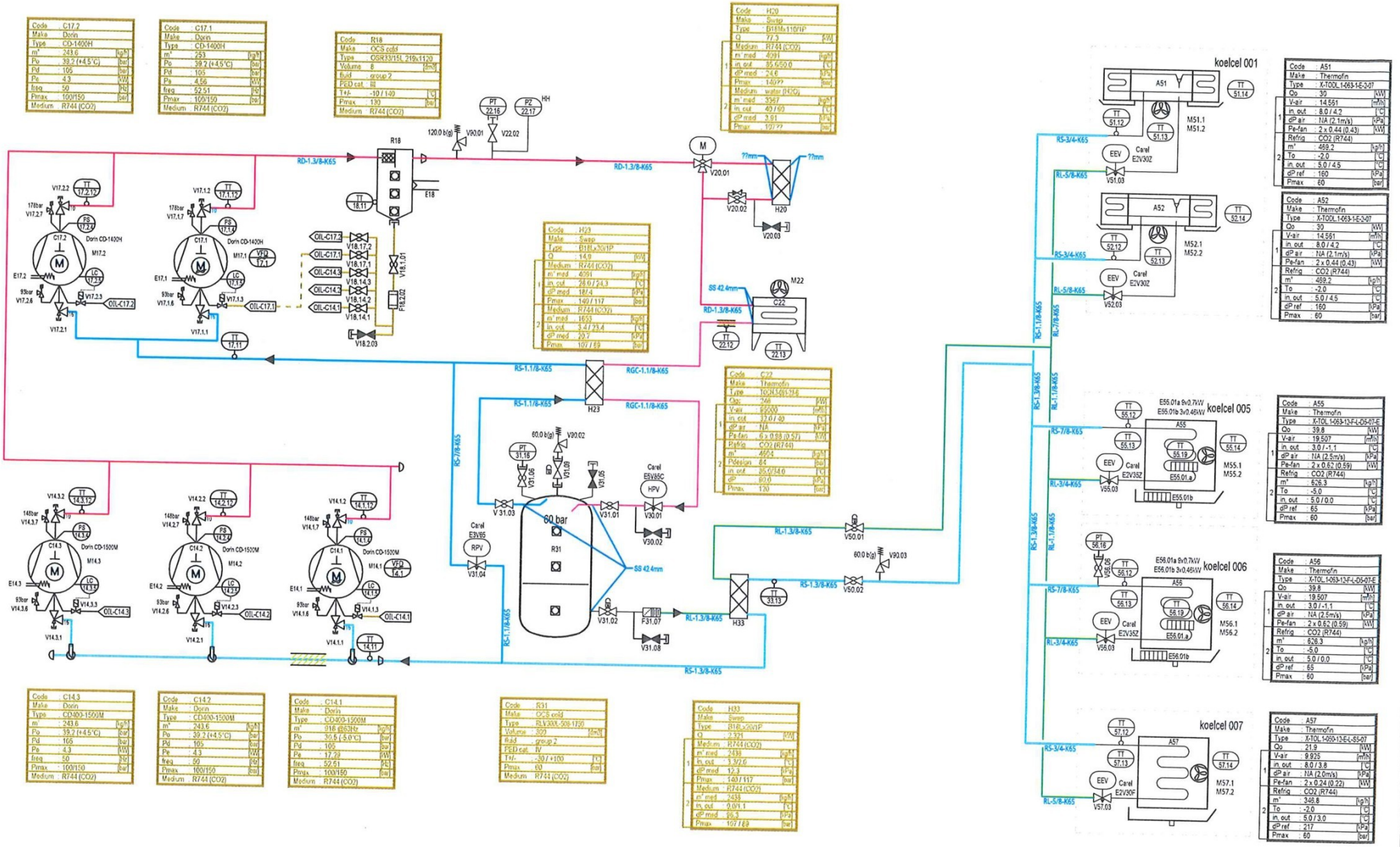
The working solution.

CE 1242

Identificatie nummer	**744-CC-2026.028-001**
Classificatie 2014/68/EU	**Cat. IV / Module F**
EU-CBI ID-nummer	**1242**
Bouwjaar	**2024**
Koelmedium	**R744**
Vulling	**240 kg**
Ontwerpdruk HT	**120 bar (o)**
Ontwerpdruk MT	**60 bar (o)**
Ontwerpdruk LT	**60 bar (o)**
Ontwerptemperatuur	**-30 / +120°C**

Vink Koeltechniek BV | Timmerfabriekstraat 16 | 2861 GV Bergambacht
F-gassen 2184445 | **NVKL** 12221

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Code	C17.2
Make	Dorin
Type	CD-1400H
m³	243.6 [kg/h]
Po	39.2 (+4.5°C) [bar]
Pd	105 [bar]
Pe	4.3 [kW]
freq	50 [Hz]
Pmax	100/150 [bar]
Medium	R744 (CO2)

Code	C17.1
Make	Dorin
Type	CD-1400H
m³	253 [kg/h]
Po	39.2 (+4.5°C) [bar]
Pd	105 [bar]
Pe	4.56 [kW]
freq	52.51 [Hz]
Pmax	100/150 [bar]
Medium	R744 (CO2)

Code	R18
Make	OCS cold
Type	OSR33/15L 219x1120
Volume	8 [dm³]
Build	group 2
PED cat.	III
T+/-	-10 / 140 [°C]
Pmax	130 [bar]
Medium	R744 (CO2)

Code	H20	
Make	Swep	
Type	B16Mx110/1P	
Q	77.3 [kW]	
Medium	R744 (CO2)	
1	m' med	4091 [kg/h]
	in, out	35.6/50.0 [°C]
	dP med	24.6 [kPa]
	Pmax	140/?? [bar]
Medium	water (H2O)	
2	m' med	3367 [kg/h]
	in, out	40/160 [°C]
	dP med	3.61 [kPa]
	Pmax	10/?? [bar]

Code	H23	
Make	Swep	
Type	B18Lx30/1P	
Q	14.9 [kW]	
Medium	R744 (CO2)	
1	m' med	4591 [kg/h]
	in, out	28.0/24.3 [°C]
	dP med	18.4 [kPa]
	Pmax	140/117 [bar]
Medium	R744 (CO2)	
2	m' med	1653 [kg/h]
	in, out	3.4/23.4 [°C]
	dP med	20.7 [kPa]
	Pmax	107/69 [bar]

Code	C22
Make	Thermofin
Type	TO-H3-01-N4
Litre	10.5 [dm³]
Qo	766 [kW]
V-air	25000 [m³/h]
in, out	32.0/40 [°C]
dP air	NA [kPa]
Pe-fan	6 x 0.88 (0.57) [kW]
Refrig	CO2 (R744)
m'	4624 [kg/h]
Pdesign	64 [bar]
in, out	85.0/34.0 [°C]
dP	60.0 [kPa]
Pmax	120 [bar]

Code	A51
Make	Thermofin
Type	X-TOOL 1-063-1-E-3-07
Qo	30 [kW]
V-air	14.561 [m³/h]
in, out	8.0 / 4.2 [°C]
dP air	NA (2.1m/s) [kPa]
Pe-fan	2 x 0.44 (0.43) [kW]
Refrig	CO2 (R744)
m'	469.2 [kg/h]
To	-2.0 [°C]
in, out	5.0 / 4.5 [°C]
dP ref	160 [kPa]
Pmax	60 [bar]

Code	A52
Make	Thermofin
Type	X-TOOL 1-063-1-E-3-07
Qo	30 [kW]
V-air	14.561 [m³/h]
in, out	8.0 / 4.2 [°C]
dP air	NA (2.1m/s) [kPa]
Pe-fan	2 x 0.44 (0.43) [kW]
Refrig	CO2 (R744)
m'	469.2 [kg/h]
To	-2.0 [°C]
in, out	5.0 / 4.5 [°C]
dP ref	160 [kPa]
Pmax	60 [bar]

Code	A55
Make	Thermofin
Type	X-TOL 1-063-12-F-L-D5-07-E
Qo	39.8 [kW]
V-air	19.507 [m³/h]
in, out	3.0 / -1.1 [°C]
dP air	NA (2.5m/s) [kPa]
Pe-fan	2 x 0.62 (0.59) [kW]
Refrig	CO2 (R744)
m'	626.3 [kg/h]
To	-5.0 [°C]
in, out	5.0 / 0.0 [°C]
dP ref	65 [kPa]
Pmax	60 [bar]

Code	A56
Make	Thermofin
Type	X-TOL 1-063-12-F-L-D5-07-E
Qo	39.8 [kW]
V-air	19.507 [m³/h]
in, out	3.0 / -1.1 [°C]
dP air	NA (2.5m/s) [kPa]
Pe-fan	2 x 0.62 (0.59) [kW]
Refrig	CO2 (R744)
m'	626.3 [kg/h]
To	-5.0 [°C]
in, out	5.0 / 0.0 [°C]
dP ref	65 [kPa]
Pmax	60 [bar]

Code	A57
Make	Thermofin
Type	X-TOL 1-050-12-E-L-S5-07
Qo	21.9 [kW]
V-air	9.925 [m³/h]
in, out	8.0 / 3.8 [°C]
dP air	NA (2.0m/s) [kPa]
Pe-fan	2 x 0.24 (0.22) [kW]
Refrig	CO2 (R744)
m'	346.8 [kg/h]
To	-2.0 [°C]
in, out	5.0 / 3.0 [°C]
dP ref	217 [kPa]
Pmax	60 [bar]

Code	C14.3
Make	Dorin
Type	CD400-1500M
m'	243.6 [kg/h]
Po	39.7 (+4.5°C) [bar]
Pd	105 [bar]
Pe	4.3 [kW]
freq	50 [Hz]
Pmax	100/150 [bar]
Medium	R744 (CO2)

Code	C14.2
Make	Dorin
Type	CD400-1500M
m'	243.6 [kg/h]
Po	39.7 (+4.5°C) [bar]
Pd	105 [bar]
Pe	4.3 [kW]
freq	50 [Hz]
Pmax	100/150 [bar]
Medium	R744 (CO2)

Code	C14.1
Make	Dorin
Type	CD400-1500M
m'	916 @63Hz [kg/h]
Po	30.5 (-5.0°C) [bar]
Pd	105 [bar]
Pe	17.28 [kW]
freq	52.51 [Hz]
Pmax	100/150 [bar]
Medium	R744 (CO2)

Code	R31
Make	OCS cold
Type	RLV300L-506-1750
Volume	300 [dm³]
Build	group 2
PED cat.	IV
T+/-	-30 / +100 [°C]
Pmax	60 [bar]
Medium	R744 (CO2)

Code	H33	
Make	Swep	
Type	B16Lx30/1P	
Q	2.371 [kW]	
Medium	R744 (CO2)	
1	m' med	2439 [kg/h]
	in, out	-3.3/2.6 [°C]
	dP med	12.3 [kPa]
	Pmax	140/117 [bar]
Medium	R744 (CO2)	
2	m' med	2439 [kg/h]
	in, out	0.0/1.1 [°C]
	dP med	95.3 [kPa]
	Pmax	107/69 [bar]

Rev.			
Rev.	D		
Rev.	C		
Rev.	B		
Rev.	A	03 March 2026	design completed with component and pipe selection

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Client	CTH Almere
Project	Air cooled Central system
Date	19-02-25
Revision	03 March 2026
Plotdate	03 March 2026
Drawn by	
Checked by	
Total pages	01

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design with component selection for approval	Refrigeration CTH
P&ID	2025.086-001

01

Vink Koeltechniek BV
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Koelinstallatie bestaande uit de volgende hoofdonderdelen

Wij hebben een centrale koel installatie ontworpen, trans kritisch Co2 systeem, deze installatie zal de koeling voor de 4 ruimten verzorgen.

Merk compressors	Dorin o.g.
Aantal IT	2 stuks waarvan 1 met een frequentie regelaar
Aantal MT	3 stuks waarvan 1 met een frequentie regelaar
Opgesteld	gebouwd op frame en voorzien van regenkap
Capaciteit koelen	160 kw bij -5 verdampingstemperatuur
Capaciteit warmte terugwinning	60kw @ 40/50°C water
Capaciteit gaskoeler	246 kw bij 34 graden buiten en 85 bar
Koudemiddel	R744 / Co2

Besturing en appendages
Centrale regeling met RDM plc en remote monitoring en logging van temperaturen en alarmen.
Gehele installatie kan zo op afstand worden beheerd door ons.

De installatie is voorzien van de nodige appendages voor veilige automatische werking en is ontworpen en gebouwd conform de EN378 en NPR7601

Ruimte verdampers

Merk verdampers	Kelvion of Thermofin o.g.
Expeditie	
Type verdamper	2 stuks dubbelzijdig blazend
Capaciteit	36 kW
Extra's	RVS buis, RVS behuizing, RVS gril voor ventilator, geïsoleerde lekbak, werkschakelaars per ventilator, AlMg lamellen

Inpak

Type verdamper	1 stuks enkelzijdig blazend
Capaciteit	21 kW
Extra's	RVS buis, RVS behuizing, RVS gril voor ventilator, geïsoleerde lekbak, werkschakelaars per ventilator, AlMg lamellen

Koelcel 1 en 2

Type verdamper	1 stuks enkelzijdig blazend
Capaciteit	39 kW
Extra's	RVS buis, RVS behuizing, RVS gril voor ventilator, geïsoleerde lekbak, werkschakelaars per ventilator, AlMg lamellen