



AIR LIQUIDE

Safety Valve List

ASU Area

Diagram No.: 86811

Revision: As B.

Date: 30.11.2006

Diagram Status: As B.

Project: KOSICE, ASU Ar

Project-No.: K70101

List Status.: As B.

COVER-SHEET

Distributor	
Name	Department
H. Delattre	ALE
H. Dr. Nipper	IA.Z
H. Dräger	IC.Z
H. Eichler	IE.Z
H. Höhner	IV.HU
H. Juckel	IV.Z
H. Jungmann	IF.HU
H. Korchi	ALE
H. Schürgers	IM.Z
H. Siudak	IM.Z
H. Wilde	IM.Z

Type of Connection

F

=

Flange joint

BW

=

Butt weld joint

T

=

Threaded joint

SW

=

Socket weld joint

CR

=

Cutting ring

Processing			
Date	Name	Checked by	Status
03.11.2004	Chiran	Rüdiger	Rev.0
12.01.2005	Chiran	Rüdiger	Rev.0
12.05.2005	Reidenbach	Gans	Rev.1
23.06.2005	Honarassa	Gans	Rev1A
14.07.2005	Dziadek	Gans	Rev1B
04.08.2005	Dziadek	Gans	Rev2
13.01.2006	Dziadek	Gans	Rev2C
15.02.2007	Dziadek/IES	Dr. Nipper	As B.

	<h2 style="margin: 0;">Safety Valve List</h2> <h3 style="margin: 0;">ASU Area</h3>	Diagram No.: 86811 Revision: As B. Date: 30.11.2006 Diagram Status: As B.	Project: KOSICE, ASU Ar Project-No.: K70101 List Status: As B.
--	--	--	--

Safety valve No.	Place of Install.	P & I Sheet Coord.	Pressure space				Valve data							Module	Remarks				
			Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet		Outlet		Type	Connection			Order data		Date of delivery	
								DN	PN	DN	PN		DIN			Seal surface	Manufacturer		Supplier
Z 11031	400 A 11002 AA10C1	001 C10	6	59	7.34		135668	300 PN16	400 PN10	F		2633 C	LESER 4412.4772	LESER		PV			
Z 11590	300 WC 80002 AA10C2	001 F3	8													TR COV			
Z 11631	WC 80012 AA10C2	027 D11	10					20 PN40	20 PN40	F		2635 C	LESER 4335.8764	MAN TURBO		COV			
Z 11824	OIL SYSTEM MAC	027 F9	8					40 PN40	65 PN16	F		2635	BESA BESA	BESA		COV			
Z 12002	100 WC 14002 AA16C1	002 C11	16	20	1000		930	1/2" PN320	1/2" PN160	T			LESER 4373.2602	LESER		TR PV			
Z 12071	150 WC 13020 AA10C2	002 E12	8	30	1000		930	1/2" PN320	1/2" PN160	T			LESER 4373.2602	LESER		TR PV			
Z 15043	600 N 15006 AA10C1	005 C5	6					"2	"2	F			OSECO FRDI	GEFA		PV			
Z 16007	500 A 15005 AA10C1	006 C1	6	20	8.2		90440	200 PN25	300 PN16	F		2634 C	LESER 4412.4614	LESER		PV			
Z 16074	250 A 16001 AA63C1	006 C9	63	23	76.1		84080	80 PN160	100 PN40	F		2638 E	LESER 4562.6034	LESER		PV			
Z 16505	300 WC 80003 AA10C2	006 F3	8					80 PN40	80 PN10				BOPP&REUT. Si 2502 GA-GS	BOPP&REUT.		COV			
Z 16631	WC 80018 AA10C2	028 D11	8													COV			
Z 16824	OIL SYSTEM BAC	028 F9	8					32 PN40	50 PN16	F		2635 C	LESER 4415.7394	MAN TURBO		COV			
Z 20026	100 N 20004 ZB40C1	009 F3	30	-149	186		16717	32 PN40	50 PN16	F		2635 C	LESER 4414.4654	LESER		PV			



Diagram No.: 88811

Revision: As B.

Date: 30.11.2006

Diagram Status: As B.

Project: KOSICE, ASU Ar

Project-No.: K70101

List Status.: As B.

Safety Valve List

ASU Area

Safety valve No.	Place of Install.	P & I Sheet	Pressure space				Valve data						Module	Remarks				
			Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet		Outlet		Connection			Order data			
		DN						PN	DN	PN	Type	Seal. surface	DIN		Manufacturer	Type	Spec.-No.	Date of delivery
Z 20027	250 O 20006 ZB40C1	009 G2	40	-124	203		113149	100 PN40	150 PN16		F	2635 C	LESER 5264.5884	LESER		PV		
Z 21012	350 N 21020 MA_W	014 C5	6					200 PN25	300 PN10		F	2634 C	LESER 4414.4794	AL AGS Hanau		CB		
Z 22010	N 22004 MA_W	013 A6	1,5					50 PN40	80 PN16		F	2635 C	LESER 4414.4674	AL AGS Hanau		CB		
Z 22020	N 22004 MA_W	013 A7	2	-185	12,7		150000	300 PN10	300 PN10		F	2632	PROQUIP FD-VZ	STRIKO		CB		
Z 22030	50 O 61111 MA_W	014 B2	16					10	15		T		Air Liquide MG-84	Air Liquide		Ventil Nr. 75197 TR, CB		
Z 23001	50 NL 23005 ZB16C1	011 C11	16					25 PN40	40 PN16		F	2635 C	LESER 4414.4644	AL AGS Hanau		TR CB		
Z 24101	50 WC 80005 AA10C2	029 E11	8					1/2" PN320	1/2" PN160		T		LESER 4373.2604	Atlas Copco		ETV		
Z 24102	150 A 24105 MA_W	007 E6	16					50 PN40	80 PN16		F	2635 C	LESER 4414.4674	AL AGS Hanau		CB		
Z 24105	100 A 20002 MA_W	007 C8	63					25 PN160	25 PN40		F	2638 C	LESER 4374.3144	AL AGS Hanau		TR CB		
Z 24155	25 N 81025 AA10C1	029 A8	16	35	19,6		1200	3/4" PN320	1" PN40		T		LESER 4593.2514	LESER		PV		
Z 24201	80 WC 80006 AA10C2	030 E11	8					1/2" PN320	1/2" PN160		T		LESER 4373.2604	Atlas Copco		ETV		
Z 24202	150 A 24205 MA_W	008 E6	16					50 PN40	80 PN16		F	2635 C	LESER 4414.4674	AL AGS Hanau		CB		
Z 24205	100 A 20001 MA-W	008 C8	63					25 PN160	25 PN40		F	2638 C	LESER 4374.3144	AL AGS Hanau		TR CB		

Project-Source: P:\ABTEIL\AGS01\PROJEKTE\K70101 ASU No9 KOSICE\Dokumente\Listen
 Formular-Source: P:\ABTEIL\AGS01\PROJEKTE\K70101 ASU No9 KOSICE\Dokumente\Listen\Formu

Date of print: 15. Feb. 07



Diagram NO.: As B.
Revision: 30.11.2006
Date: As B.
Diagram Status: As B.

Project: KOSICE, ASU Ar
Project-No.: K70101
List Status.: As B.

Safety valve No.	Place of Install.	P & I Sheet Coord.	Pressure space				Valve data										Module	Remarks	
			Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet		Outlet		Connection		Order data					
								DN	PN	DN	PN	Type	DIN	Manufacturer	Type	Supplier			Date of delivery
Z 24255	25 N 81026 AA10C1	030 A8	16	35	19.6		1200	3/4"	PN320	1"	PN40	T		LESER	4593.2514	LESER		PV	
Z 40012	150 R 40015 MA_W	017 A7	2					40	PN40	65	PN16	F	2635 C	LESER	4414.4664	AL AGS Hanau		TR CB	
Z 40102	200 OL 40001 ZB16C1	016 F7	6					25	PN40	40	PN16	F	2635 C	LESER	4414.4644	AL AGS Hanau		TR CB	
Z 40150	100 OL 40101 ZB16C1	016 E4	16					10		15		T		Air Liquide		Air Liquide		Ventil Nr. 58835 TR, CB	
Z 40170	80 OL 40103 ZB16C1	016 C4	16					10		15		T		Air Liquide		Air Liquide		TR CB	
Z 43028	N 43014 MA_W	018 A10	6					10		15		T		Air Liquide		Air Liquide		Ventil Nr. 72034 TR, CB	
Z 43032	A 15046 MA_W	018 C5	2					40	PN40	65	PN16	F	2635 C	LESER	4414.4664	AL AGS Hanau		TR CB	
Z 44052	50 RL 44205 ZB40C1	042 A8	40					10		15		T		Air Liquide		Air Liquide		Ventil Nr. 74552 PV	
Z 44062	50 RL 48004 ZB40C1	043 A5	40					10		15		T		Air Liquide		Air Liquide		Ventil Nr. 74573 PV	
Z 44104	25 RL 44104 ZB40C1	041 D9	40	-127	265		68	10		15		T		Air Liquide		Air Liquide		TR PV	
Z 44106	B44101	041 D4	40					10		15		T		Air Liquide		Air Liquide		Ventil Nr. 70885 TR, TV	
Z 44110	25 RL 43001 ZB16C1	041 F5	16	-147	85		712	1/2"	PN320	1/2"	PN160	T		LESER	4374.3142	LESER		TR PV	
Z 44136	B44101	041 A7	6					10		15		T		Air Liquide		Air Liquide		Ventil Nr. 67027 TR, TV	

Date of print: 15. Feb. 07




Diagram No.: 86811

Revision: AS B.

Date: 30.11.2006

Diagram Status: AS B.

Project: KOSICE, ASU Ar


Project-No.: K70101

List Status.: AS B.

Safety Valve List

ASU Area

Safety valve No.	Place of Install.	P & I Sheet Coord.	Pressure space				Valve data							Module	Remarks				
			Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet	Outlet		Connection		Order data						
									DN	PN	Type	DIN	Seal. surface			Manufacturer	Type	Supplier	Date of delivery
Z 44137	B44101	041 A8	6					10	15	T		Air Liquide MG-95	Air Liquide		Ventil Nr. 66404 TR, TV				
Z 44204	25 RL 44204 ZB40C1	042 E8	40					10	15	T		Air Liquide MG-84	Air Liquide		TR PV				
Z 44210	B44201	042 E3	40					10	15	T		Air Liquide MG-84	Air Liquide		Ventil Nr. 70890 TR, TV				
Z 44236	B44201	042 B6	6					10	15	T		Air Liquide MG-84	Air Liquide		Ventil Nr. 70575 TR, TV				
Z 44237	B44201	042 B7	6					10	15	T		Air Liquide MG-84	Air Liquide		Ventil Nr. 70577 TR, TV				
Z 44250	80 RL 44101 ZB16C1	042 G5	7	-160	40	1527		3/4" PN320	1" PN40	T		LESER 4594.2562	LESER		TR PV				
Z 44251	80 RL 44201 ZB16C1	042 F7	7	-160	40	1527		3/4" PN320	1" PN40	T		LESER 4594.2562	LESER		TR PV				
Z 48010	B48001	044 E3	40					10	15	T		Air Liquide MG-84	Air Liquide		Ventil Nr. 70880 TR, TV				
Z 48011	80 RL 44101 ZB16C1	043 F4	7	-160	40	1527		3/4" PN320	1" PN40	T		LESER 4594.2562	LESER		TR PV				
Z 48020	25 R 48033 ZB40C1	044 F6	40	-127	265	68		10	15	T		Air Liquide MG-84	Air Liquide		TR PV				
Z 48038	B48001	044 C3	40					10	15	T		Air Liquide MG-84	Air Liquide		Ventil Nr. 70911 TR, TV				
Z 48050	50 RL 48001 ZB40C1	043 C8	40	-127	265	204		10	15	T		Air Liquide MG-84	Air Liquide		TR PV				
Z 48061	B48001	044 B4	37					10	15	T		Air Liquide MG-84	Air Liquide		Ventil Nr. 71059 TR, TV				


AIR LIQUIDE

Safety Valve List
ASU Area

Diagram No.: ...86811
Revision: As B.
Date: 30.11.2006
Diagram Status: As B.

Project: KOSICE, ASU Ar
Project-No.: K70101
List Status.: As B.

Safety valve No.	Place of Install.	P & I Sheet	Pressure space				Valve data										Module	Remarks
			Coord.	Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet		Outlet	Connection		Order data				
		DN							PN	DN		Seal. surface	Manufacturer	Supplier	Date of delivery			
											10					15	T	Air Liquide
Z 48062	B48001	044 B4	37					10	15				Air Liquide	MG-84	Air Liquide		Ventil Nr. 08152 TR, TV	
Z 48063	25 R 48009 ZB40C1	044 C7	40					10	15				Air Liquide	MG-84	Air Liquide		TR PV	
Z 48102	50 R 48033 ZB40C1	044 F8	40	25	68	2460		3/4"	1"	1"	PN320 PN40	T	LESER	4594.2564	LESER		PV	
Z 48202	50 R 48034 ZB40C1	044 G8	40	25	68	2460		3/4"	1"	1"	PN320 PN40	T	LESER	4594.2564	LESER		PV	
Z 61001	50 OL 61102 ZB10C1	011 E11	10					32 PN40	50 PN16	F	2635 C	F	LESER	4414.4654	AL AGS Hanau		CB	
Z 61102	200 OL 21007 MA__W	012 D8	6					25 PN40	40 PN16	F	2635 C	F	LESER	4414.4644	AL AGS Hanau		TR CB	
Z 61150	100 OL 61101 ZB40C1	012 C4	40					1/2"	3/4"	T		T					TR CB	
Z 61170	100 OL 61105 ZB40C1	012 B5	40					1/2"	3/4"	T		T					TR CB	
Z 61202	150 OL 21008 ZB16C1	012 G5	6					25 PN40	40 PN16	F	2635 C	F	LESER	4414.4644	AL AGS Hanau		TR CB	
Z 61250	100 OL 61201 ZB40C1	012 G2	40					1/2"	3/4"	T		T					TR CB	
Z 61270	100 OL 61205 ZB40C1	012 C3	40					1/2"	3/4"	T		T					TR CB	
Z 70505	150 WC 80007 AA10C2	019 F4	8					15 PN40	15 PN40	F	2635 C	F	LESER	4335.8752	Atlas Copco		COV	
Z 71102	80 NL 21013 MA__W	015 D8	6					25 PN40	40 PN16	F	2635 C	F	LESER	4414.4644	AL AGS Hanau		TR CB	


AIR LIQUIDE

Safety Valve List
ASU Area

Diagram No.: 86811
Revision: As B.
Date: 30.11.2006
Diagram Status: As B.

Project: KOSICE, ASU Ar
Project-No.: K70101
List Status: As B.

Safety valve No.	Place of Install.	P & I Sheet	Pressure space				Valve data							Module	Remarks				
			Coord.	Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet		Outlet		Connection			Order data		Date of delivery	
		DN							PN	DN	PN	Type	Seal. surface	Manufacturer		Type	Supplier		
																			1/2"
Z 71150	50 NL 71101 ZB40C1	015 C4	40					1/2"	PN320	1/2"	PN160	T		LESER	4373.2604			TR	CB
Z 71170	50 NL 71102 ZB16C1	015 A4	40					1/2"		3/4"		T						TR	CB
Z 71180	15 N 20028 AA40C1	015 E11	10	20	12.8		206	1/2"	PN320	1/2"	PN160	T		LESER	4373.2604			PV	
Z 71202	80 NL 21014 ZB16C1	015 G5	6					25	PN40	40	PN16	F	2635 C	LESER	AL AGS Hanau			TR	CB
Z 71250	50 NL 71201 ZB40C1	015 F2	40					1/2"		3/4"		T						TR	CB
Z 71270	50 NL 71202 ZB40C1	015 C2	40					1/2"		3/4"		T						TR	CB
Z 73001	40 NL 73001 MA_W	014 E3	16					1/2"		3/4"		T						TR	CB
Z 77505	250 WC 80008 AA10C2	020 F4	8					15	PN40	15	PN40	F	2635 C	LESER	Atlas Copco			COV	
Z 87012	100 N 87001 AA10C1	024 G5																PV	
Z 87013	H- BOX	024 C7	0.005-0.015											PROTEGO	AL AGS			CB	
Z 87014	H- BOX	024 A9	0.005-0.015											PROTEGO	AL AGS			CB	
X 87026	H- BOX	024 D7	0.008												VD/SV 150			CB	
X 87027	H- BOX	024 D6	0.015															CB	



Diagram No.: 86811

Revision: As B.

Date: 30.11.2006

Diagram Status: As B.

Project: KOSICE, ASU Ar

Project-No.: K70101

List Status.: As B.

Safety Valve List

ASU Area

Safety valve No.	Place of Install.	P & I Sheet Coord.	Pressure space				Valve data							Module	Remarks		
			Set pressure (bar ü)	Temp. (°C)	Density (kg/m³)	Operating flow rate (kg/h)	Blow off mass (kg/h)	Inlet		Outlet		Connection				Order data	
								DN	PN	DN	PN	Type	Seal. surface			Manufacturer	Supplier
X 87066	H- BOX	024 A8	0,008														CB
X 87072	H- BOX	024 D9	0,015														CB
X 87078	H- BOX	024 E9	0,015														CB
Z 90013	50 NL 90004 ZB16C1	026 A4	16	-177	716		6500	3/4" PN320		1" PN40		T		LESER 4594.2564	LESER		PV
Z 90014	80 OL 90001 ZB16C1	026 A3	16	-177	1120		16000	1" PN160		1 1/2" PN40		T		LESER 4594.2574	LESER		PV
Z 90015	50 RL 90002 ZB16C1	026 A5	16	-147	85		1000	3/4" PN320		1" PN40		T		LESER 4594.2562	LESER		TR PV