COVER SHEET

REVISIONS INDEX	0	A	B	C	D	E	F	G
SHEET NO. 1	X	X						
SHEET NO. 2	X	X						
SHEET NO. 3	X	X						
SHEET NO. 4	X	X						
SHEET NO. 5	X	X						

NOTES:

NOTE 1: MEASURED VIBRATION LEVEL +23 um; BUT MAX. THE INDICATED SET POINT
NOTE 2: MEASURED VIBRATION LEVEL +41 um; BUT MAX. THE INDICATED SET POINT
NOTE 3: MEASURED VIBRATION LEVEL +37 um; BUT MAX. THE INDICATED SET POINT
NOTE 4: MEASURED VIBRATION LEVEL +64 um; BUT MAX. THE INDICATED SET POINT
NOTE 5: MEASURED TEMPERATURE +10° C; BUT MAX. THE INDICATED SET POINT
NOTE 6: MEASURED TEMPERATURE +20° C; BUT MAX. THE INDICATED SET POINT

ABBREVIATIONS	
SS	SUCTION SIDE
DS	DISCHARGE SIDE
LO(S)	LUBE OIL (SYSTEM)
NDE	NON DRIVE END / NON DRIVEN END
DE	DRIVE END / DRIVEN END
IGV	INLET GUIDE VANES
ASV	ANTI SURGE VALVE
O/B	OUTBOARD
I/B	INBOARD
IC	INTERCOOLER
CW	COOLING WATER
CA	COLD AIR
HA	HOT AIR
HSS	HIGH SPEED SHAFT
LSS	LOW SPEED SHAFT

REFERENCE DOCUMENTS

P&I DIAGRAM	PROCESS AND WATER	0-837 016 878 p002
P&I DIAGRAM	MECHANIC	0-837 016 878 p003
P&I DIAGRAM	LUBE OIL SYSTEM	0-837 016 878 p004

AIR LIQUIDE™

N° D'AFFAIRE *JOB NUMBER*	FMT *FMT*	GROUPE *GROUP*	N° *NBR*	Rev *Rev*
KOSICE 50-3023-01	A4	**611**	801-05	A

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				Bearb. Drawn	01.11.04	P. WÄLTI
				Geprüft Checked	02.11.04	CH.SELINGER
A	FINAL	10.03.05	WAP / SEL			

Verwendungsbereich / Field of application: KOSAIR 2004 N 710 0175

MAN

Benennung / Title: ALARM & TRIP LIST

CAD-Zeichnung / CAD-Drawing: AP

Abt. / Dept.: SC71

Zeichnungs-Nr. / Drawing No.: 837 017 129

Index Rev.: A

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IND. REV.	POS.-NR. TAG-NO. MTM	POS.-NR. TAG-NO. AIR LIQUIDE	BEZEICHNUNG DESIGNATION	E/A BEREICH I/O RANGE	ALARMWERT SETPOINT	SIGNAL VON FROM	SIGNAL NACH TO	I/O TYP EINGANGSSIGNAL INPUT SIGNAL	I/O TYP AUSGANGSSIGNAL OUTPUT SIGNAL	I/O ADRESS KARTE-KANAL CARD-CHANNEL	SIGNAL CLASS EEx	SIGNAL CLASS SAFETY CRITICAL	ART DES SIGNALS TYPE OF SIGNAL ANZEIGE INDICATION/CONTR	BETRIEBSMELDUNG STATUS	VORALARM PREALARM	WARNUNG ALARM	ABSCHALTUNG SHUT DOWN	SHUTDOWN WITH DELAY	VERWEISE REFERENCES R&I P&ID	VERWEISE REFERENCES STROMLAUFPLAN WIRING DIAGRAM	BEMERKUNG REMARK
	PAL 7088	PAL 11747	SCHMIEROELDRUCK LOW LUBE OIL PRESSURE LOW	0...2,5 barg	1.2 barg	DCS	DCS	DI		/			X			X			p 003	'	START UP INTERLOCK
	TSAHH 7081A	TSAHH 11810	OELHEIZUNGSTEMPERATURSCHUTZ HIGH HIGH OIL HEATER TEMP. PROTECTION HIGH HIGH	80° C	80° C	FIELD	DCS	DI		/			X			X			p 004	'	REQUIRES MANUAL RESET
	TSAHH 7081B	TSAHH 11811	OELHEIZUNGSTEMPERATURSCHUTZ HIGH HIGH OIL HEATER TEMP. PROTECTION HIGH HIGH	80° C	80° C	FIELD	DCS	DI		/			X			X			p 004	'	REQUIRES MANUAL RESET
	LAL 7080	LAL 11812	LEVEL OEL TANK LOW LEVEL OIL RESERVOIR LOW	0...100 %	30 %	DCS	DCS	DI		/			X			X			p 004	'	INTERLOCK L O PUMP &HEATER
	PDSAH 7080	PDSAH 11812	DIFF-DRUCK UNTERDRUCKGEBLAESE HIGH DIFFERENTIAL PRESSURE OIL MIST FAN HIGH	HOLD	HOLD	FIELD	DCS	DI		/			X			X			p 004	'	TO BE DEFINED BY CLIENT
	TSAHH 7081C	TSAHH 11812	OELHEIZUNGSTEMPERATURSCHUTZ HIGH HIGH OIL HEATER TEMP. PROTECTION HIGH HIGH	80° C	80° C	FIELD	DCS	DI		/			X			X			p 004	'	REQUIRES MANUAL RESET
	TAH 7080	TAH 11814	TEMPERATUR OELTANK HIGH TEMPERATURE LUBE OIL RESERVOIR HIGH	0...100° C	30° C	DCS	DCS	DI		/			X			X			p 004	'	LUBE OIL HEATER "OFF"
	TAL 7080	TAL 11814	TEMPERATUR. OELTANK LOW TEMPERATURE LUBE OIL RESERVOIR LOW	0...100° C	25° C	DCS	DCS	DI		/			X			X			p 004	'	LUBE OIL HEATER "ON"
	TALL 7080	TALL 11814	TEMPERATUR OELTANK LOW LOW TEMPERATURE LUBE OIL RESERVOIR LOW LOW	0...100° C	10° C	DCS	DCS	DI		/			X			X			p 004	'	LUBE OIL PUMP INTERLOCK
	PDSAH 7087	PDSAH 11846	DIFF. DRUCK OELFILTER HIGH DIFF. PRESSURE OEL FILTER HIGH	0...1,6 bar	1.0 barg	FIELD	DCS	DI		/			X			X			p 004	'	
	PAL 7086	PAL 11854	SCHMIEROELDRUCK TEST LINE LOW LUBE OIL PRESSURE TEST LINE LOW	0...2.5 barg	1.2 barg	DCS	DCS	DI		/			X			X			p 004	'	START AUX. OIL PUMP
	TAH 7086	TAH 11854	TEMP. NACH OELFILTER HIGH TEMP. DOWNSTREAM OIL FILTER HIGH	0...100° C	50° C	DCS	DCS	DI		/			X			X			p 004	'	
	TAL 7086	TAL 11854	TEMP. NACH OELFILTER LOW TEMP. DOWNSTREAM OIL FILTER LOW	0...100° C	30° C	DCS	DCS	DI		/			X			X			p 004	'	
	ZSAL 7019	GSAL 11010	POSITION IGV LOW "GESCHLOSSEN" POSITION IGV LOW "CLOSED"	0 %	1 %	DCS	DCS	DI					X			X			p 002	/	START UP INTERLOCK
	TAH 7016A	TAH 11011	1. STUFE AUSTRITT TEMPERATUR HIGH 1. STAGE DISCHRAGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7016B	TAH 11012	1. STUFE AUSTRITT TEMPERATUR HIGH 1. STAGE DISCHARGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7017A	TAH 11016	2. STUFE EINTRITTSTEMPERATUR HIGH 2. STAGE SUCTION TEMPERATURE HIGH	0...160° C	50 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7017B	TAH 11017	2. STUFE EINTRITTSTEMPERATUR HIGH 2. STAGE SUCTION TEMPERATURE HIGH	0...160° C	50 °C	DCS	DCS	DI		/			X			X			p 002	'	

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A	FINAL	10.03.05	WAP / SEL	Bearb. Drawn	01.11.04	WAP
				Geprüft Checked	02.11.04	SEL

Verwendungsbereich Field of application: KOSAIR 2004 N 710 0175

MAN

Benennung Title: ALARM & TRIP LIST

CAD-Zeichnung CAD-Drawing: AP

Zeichnungs-Nr. Drawing No.: 837 017 129

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IND. REV.	POS.-NR. TAG-NO. MTM	POS.-NR. TAG-NO. AIR LIQUIDE	BEZEICHNUNG DESIGNATION	E/A BEREICH I/O RANGE	ALARMWERT SETPOINT	SIGNAL VON FROM	SIGNAL NACH TO	I/O TYP EINGANGSSIGNAL INPUT SIGNAL	I/O TYP AUSGANGSSIGNAL OUTPUT SIGNAL	I/O ADRESS KARTE-KANAL CARD-CHANNEL	SIGNAL CLASS EEx	SIGNAL CLASS SAFETY CRITICAL	ART DES SIGNALS TYPE OF SIGNAL ANZEIGE INDICATION/CONTR	BETRIEBSMELDUNG STATUS	VORALARM PREALARM	WARNUNG ALARM	ABSCHALTUNG SHUT DOWN	SHUTDOWN WITH DELAY	VERWEISE REFERENCES R&I P&ID	VERWEISE REFERENCES STROMLAUFPLAN WIRING DIAGRAM	BEMERKUNG REMARK
	TAH 7026A	TAH 11021	2. STUFE AUSTRITT TEMPERATUR HIGH 2. STAGE DISCHARGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7026B	TAH 11022	2. STUFE AUSTRITT TEMPERATUR HIGH 2. STAGE DISCHARGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7027A	TAH 11026	3. STUFE EINTRITTSTEMPERATUR HIGH 3. STAGE SUCTION TEMPERATURE HIGH	0...160° C	50 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7027B	TAH 11027	3. STUFE EINTRITTSTEMPERATUR HIGH 3. STAGE SUCTION TEMPERATURE HIGH	0...160° C	50 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7036A	TAH 11031	3. STUFE AUSTRITT TEMPERATUR HIGH 3. STAGE DISCHARGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7036B	TAH 11032	3. STUFE AUSTRITT TEMPERATUR HIGH 3. STAGE DISCHARGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7037A	TAH 11036	4. STUFE EINTRITTSTEMPERATUR HIGH 4. STAGE SUCTION TEMPERATURE HIGH	0...160° C	50 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7037B	TAH 11037	4. STUFE EINTRITTSTEMPERATUR HIGH 4. STAGE SUCTION TEMPERATURE HIGH	0...160° C	50 °C	DCS	DCS	DI		/			X			X			p 002	'	
	TAH 7038	TAH 11041	KOMPRESSORAUSTRITTSTEMPERATUR HIGH COMPRESSOR DISCHARGE TEMPERATURE HIGH	0...160° C	100 °C	DCS	DCS	DI		/			X			X			p 002	'	
	EA 7010	EA 11080	BEKO-MAT 1.STUFE ERROR BEKO-MAT 1.STAGE ERROR	/	/	FIELD	DCS	DI					X			X			p 002	'	
	EA 7020	EA 11081	BEKO-MAT 2.STUFE ERROR BEKO-MAT 2.STAGE ERROR	/	/	FIELD	DCS	DI					X			X			p 002	'	
	EA 7030	EA 11082	BEKO-MAT 3.STUFE ERROR BEKO-MAT 3.STAGE ERROR	/	/	FIELD	DCS	DI					X			X			p 002	'	
	PAL 7001	PAL 11754	SPERRKAMMERDRUCK LOW SEAL CHAMBER PRESSURE LOW	0...50 mbarg	8 mbarg	DCS	DCS	DI		/			X			X			p 002	'	START UP INTERLOCK LUBE OIL PUMP
	TAH 7042A	TAH 11745	KOMPRESSOR DS LAGERTEMPERATUR HIGH COMPRESSOR DS BEARING TEMPERATURE HIGH	0...160° C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	VAH 7041-1	XAH 11745	KOMPRESSOR DS VIBRATION HIGH COMPRESSOR DS VIBRATION HIGH	0...200 um	75 um	DCS	DCS	DI		/			X			X			p 003	'	NOTE 1
	TAH 7011A	TAH 11747	KOMPRESSOR SS RADIALLAGERTEMP. HIGH COMPRESSOR SS RADIAL BEARINGTEMP. HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	VAH 7011-1	XAH 11747	KOMPRESSOR SS VIBRATION HIGH COMPRESSOR SS VIBRATION HIGH	0...200 um	75 um	DCS	DCS	DI		/			X			X			p 003	'	NOTE 1
	TAH 7004A	TAH 11730	GETRIEBE LSS DE LAGERTEMP. HIGH GEAR LSS DE BEARING TEMP. HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5

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				Geprüft Checked	02.11.04	SEL

Verwendungsbereich
Field of application
KOSAIR 2004
N 710 0175

MAN

Benennung
Title
ALARM & TRIP LIST

CAD-Zeichnung
CAD-Drawing AP

Zeichnungs-Nr.
Drawing No. 837 017 129

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IND. REV.	POS.-NR. TAG-NO. MTM	POS.-NR. TAG-NO. AIR LIQUIDE	BEZEICHNUNG DESIGNATION	E/A BEREICH I/O RANGE	ALARMWERT SETPOINT	SIGNAL VON FROM	SIGNAL NACH TO	I/O TYP EINGANGSSIGNAL INPUT SIGNAL	I/O TYP AUSGANGSSIGNAL OUTPUT SIGNAL	I/O ADRESS KARTE-KANAL CARD-CHANNEL	SIGNAL CLASS EEx	SIGNAL CLASS SAFETY CRITICAL	ART DES SIGNALS TYPE OF SIGNAL ANZEIGE INDICATION/CONTR	BETRIEBSMELDUNG STATUS	VORALARM PREALARM	WARNUNG ALARM	ABSCHALTUNG SHUT DOWN	SHUTDOWN WITH DELAY	VERWEISE REFERENCES R&I P&ID	STROMLAUFPLAN WIRING DIAGRAM	BEMERKUNG REMARK
	TAH 7003A	TAH 11733	GETRIEBE LSS NDE LAGERTEMP. HIGH GEAR LSS NDE BEARING TEMP. HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	TAH 7012A	TAH 11735	AXIALLAGER I/B TEMPERATUR HIGH THRUST BEARING I/B TEMPERATURE HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	TAH 7001A	TAH 11737	AXIALLAGER O/B TEMPERATUR HIGH THRUST BEARING O/B TEMPERATURE HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	TAH 7007A	TAH 11740	GETRIEBE HSS NDE LAGERTEMP. HIGH GEAR HSS NDE BEARING TEMP. HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	VAH 7004-1	XAH 11740	GETRIEBE HSS NDE VIBRATION HIGH GEAR HSS NDE VIBRATION HIGH	0...200 um	75 um	DCS	DCS	DI		/			X			X			p 003	'	NOTE 1
	ZAH 7001	GAH 11742	AXIALVERSCHIEBUNG HIGH AXIAL DISPLACEMENT HIGH	-2.0...+2.0 mm	±0.6 mm	DCS	DCS	DI		/			X			X			p 003	'	
	TAH 7006A	TAH 11743	GETRIEBE HSS DE LAGERTEMP. HIGH GEAR HSS DE BEARING TEMP. HIGH	0...160 °C	110 °C	DCS	DCS	DI		/			X			X			p 003	'	NOTE 5
	VAH 7006-1	XAH 11743	GETRIEBE HSS DE VIBRATION HIGH GEAR HSS DE VIBRATION HIGH	0...200 um	75 um	DCS	DCS	DI		/			X			X			p 003	'	NOTE 1
	PALL 7088	PALL 11747	SCHMIEROELDRUCK LOW LOW LUBE OIL PRESSURE LOW LOW	0...2,5 barg	0.8 barg	DCS	DCS	DI		/			X				X		p 003	'	
	TAHH 7038	TAHH 11041	KOMPRESSORAUSTRITTSTEMPERATUR HIGH HIGH COMPR. DISCHARGE TEMPERATURE HIGH HIGH	0...160° C	110 °C	DCS	DCS	DI		/			X				X		p 002	'	
	TAHH 7042A	TAHH 11745	KOMPRESSOR DS LAGERTEMPERATUR HIGH HIGH COMPRESSOR DS BEARING TEMP. HIGH HIGH	0...160° C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	VAHH 7041-1	XAHH 11745	KOMPRESSOR DS VIBRATION HIGH HIGH COMPRESSOR DS VIBRATION HIGH HIGH	0...200 um	94 um	DCS	DCS	DI		/			X				X		p 003	'	NOTE 2
	TAHH 7011A	TAHH 11747	KOMPRESSOR SS RADIALLAGERTEMP. HIGH HIGH COMPRESSOR SS BEARING TEMP. HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	VAHH 7011-1	XAHH 11747	KOMPRESSOR SS VIBRATION HIGH HIGH COMPRESSOR SS VIBRATION HIGH HIGH	0...200 um	94 um	DCS	DCS	DI		/			X				X		p 003	'	NOTE 2
	TAHH 7004A	TAHH 11730	GETRIEBE LSS DE LAGERTEMP. HIGH HIGH GEAR LSS DE BEARING TEMP. HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	TAHH 7003A	TAHH 11733	GETRIEBE LSS NDE LAGERTEMP. HIGH HIGH GEAR LSS NDE BEARING TEMP. HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	TAHH 7012A	TAHH 11735	AXIALLAGER I/B TEMPERATUR HIGH HIGH THRUST BEARING I/B TEMPERATURE HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	TAHH 7001A	TAHH 11737	AXIALLAGER O/B TEMPERATUR HIGH HIGH THRUST BEARING O/B TEMPERATURE HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6

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MAN

Benennung Title: ALARM & TRIP LIST

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Zeichnungs-Nr. Drawing No.: 837 017 129

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	TAHH 7007A	TAHH 11740	GETRIEBE HSS NDE LAGERTEMP. HIGH HIGH GEAR HSS NDE BEARING TEMP. HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	VAHH 7004-1	XAHH 11740	GETRIEBE HSS NDE VIBRATION HIGH HIGH GEAR HSS NDE VIBRATION HIGH HIGH	0...200 um	94 um	DCS	DCS	DI		/			X				X		p 003	'	NOTE 2
	ZAHH 7001	GAHH 11742	AXIALVERSCHIEBUNG HIGH HIGH AXIAL DISPLACEMENT HIGH HIGH	-2.0...+2.0 mm	±0.8 mm	DCS	DCS	DI		/			X				X		p 003	'	
	TAHH 7006A	TAHH 11743	GETRIEBE HSS DE LAGERTEMP. HIGH HIGH GEAR HSS DE BEARING TEMP. HIGH HIGH	0...160 °C	120 °C	DCS	DCS	DI		/			X				X		p 003	'	NOTE 6
	VAHH 7006-1	XAHH 11743	GETRIEBE HSS DE VIBRATION HIGH HIGH GEAR HSS DE VIBRATION HIGH HIGH	0...200 um	94 um	DCS	DCS	DI		/			X				X		p 003	'	NOTE 2

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