

KOSAIR 2004

 AIR LIQUIDE TM				
N° D'AFFAIRE JOB NUMBER	FMT FMT	GROUPE GROUP	N° NBR	Rev Rev
KOSICE 50-3023-01	A4	611		

Rev.	Changed	Date	Checked	Date	Change No.	Change description
	Rindlisbacher H	13.07.2005				
Issued	Date	Checked	Date	Released	Date	
Type/Size: RIK 80-1+1+1+1						Doc Type: SPE
Project No: N.7100175			Doc Title: IGV Actuator & Instrument Specification			
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INSTRUMENT SPECIFICATION



<u>PNEUMATICALLY OPERATED GUIDE VANE ACTUATOR</u>	<u>3</u>
GY 11010 / F150-0106DdKG/XP/Spec / MAFAG	
<u>ANTISURGE / PRESSURE LIMITATION CONTROLLER</u>	<u>6</u>
FIC 11077, FIC 16074 / PROTRONIC 550 / ABB NORMELEC	
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PLUG IN MODULES / ABB NORMELEC	

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INSTRUMENT SPECIFICATION



PNEUMATICALLY OPERATED GUIDE VANE ACTUATOR

GY 11010 / F150-0106DdKG/XP/Spec / MAFAG

(MAT.-No.: 10108817)

ACTUATOR SPECIFICATIONS:

ACTUATOR TYPE : F150-0106DdKG/XP/Spec
STROKE : 106 MM
ACTING PISTON AREA : 170 CM2
SHAFT-END THREAD : M20 X 1.5 MM
INSTRUMENT AIR SUPPLY PRESS. MIN : 4 BARG
OPENING/CLOSING TIME VIA POSITIONER : 10 - 15 SEC

AUXILIARIES:

POSITIONER TYPE : ND9103HNTK05
PRODUCT GROUP : ND VALVE CONTROLLER
SERIES CODE : 9 ATTACH. ACC. VDI/VDE 3845
ENCLOSURE : 10 STANDARD IP65/NEMA 4X
SPOOL VALVE & CONNECTIONS : 3 NORMAL CAPACITY, G 1/4"
COMMUNIC./INPUT SIGNAL RANGE : H HART; 4-20 MA
APPROVALS : N NO APPROVALS
POS. TRANSMITTER : T 2-WIRE PASSIVE POSITION TRANSMITTER
LIMIT SWITCHES : K05 OMRON
ACTION OF POSITIONER : DOUBLE ACTION
SUPPLY PRESSURE : 4.5 BARG
INCREASING INPUT SIGNAL : PUSHES THE ROD IN
PRESSURE GAUGES : WITH
PNEUMATIC PORTS : G 1/4"
ELECTRICAL CONNECTION : M20 X 1.5 MM, WITH CABLE GLAND
OUTPUT SIGNAL : 4-20 MA
MOUNTING STYLE OF POSITIONER : ACCORDING TO NAMUR
POSITIONER SETTINGS : DIR: OPE
(FAIL SAFE ACTION) PFA: OPE

INSTRUMENTATION:

AIR SET FILTER : FISHER FS67CFR-226/C7/SDV, W/GAUGE 1/4"
NPTF
SHUT-OFF VALVE : LANDEFELD KH 14 ES, 1/4" NPT
INSTRUMENT TUBING/FITTINGS : SST/ERMETO

TESTS:

INSPECTION AND TEST PLAN : N/A
QUALITY ASSURANCE : MAFAG STANDARD
FUNCTION TEST : MAN TURBO STANDARD

REMARKS:

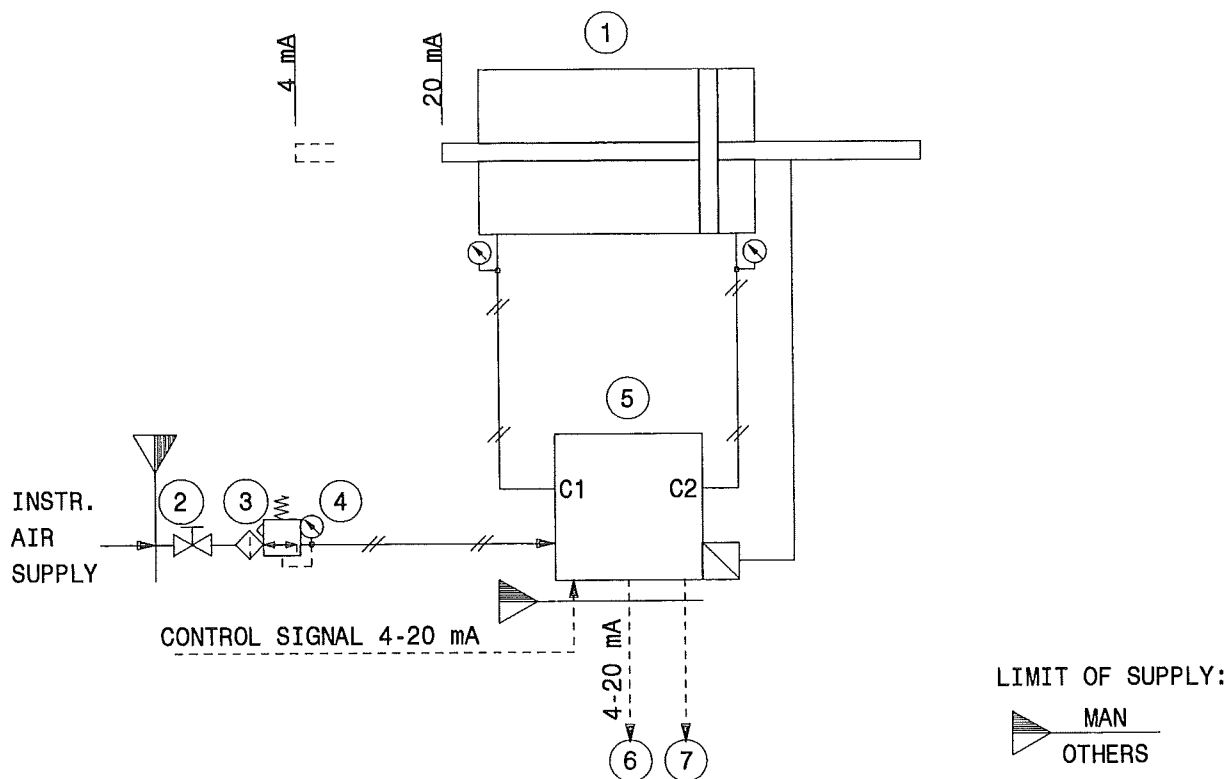
PAINTING : MAFAG STANDARD
AREA CLASSIFICATION : N/A
AIR SUPPLY : VERTICAL FROM BELOW

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INSTRUMENT SPECIFICATION



SCHEMATIC DRAWING GUIDE VANE ACTUATOR:



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PARTS LIST				
ITEM	DESCRIPTION	MANUFACTURER	MODEL/TYPE	TAG-NO.
1	PISTON ACTUATOR	MAFAG	F 150-0106	GY 11010
2	SHUT-OFF VALVE	LANDEFELD	KH 14 ES, 1/4"	
3	AIR FILTER	FISHER	FS67CFR-226/C7/SDV	
4	REGULATOR	FISHER	FS67CFR-226/C7/SDV	
5	E/P POSITIONER	NELES	ND 9000	GC 11010
6	POSITION TRANSMITTER	NELES	INCLUDED IN ITEM NO. 5	GT 11010
7	LIMIT SWITCHES	OMRON	INCLUDED IN ITEM NO. 5	GSH 11010 GSL 11010

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INSTRUMENT SPECIFICATION



ANTISURGE / PRESSURE LIMITATION CONTROLLER

FIC 11077, FIC 16074 / PROTRONIC 550 / ABB NORMELEC

(MAT.-No.: 10307048)

QUANTITY : 2

SERVICE : ANTISURGE CONTROL,
PRESSURE LIMITAION

TYPE : PROTRONIC 550

ORDER No. : 62615A-0-2111110/Z2E

OPTION DESCRIPTION : PRE CONFIGURED SINGLE-CHANNEL
62615A-0- STANDARD MODELS PROTRONIC 500/550

2 : PROTRONIC 550

1 : POWER SUPPLY 110 - 230 VAC

1 : FREE CONFIGURABLE

11110 : N/A

/Z2E : ENGLISH MANUAL

POWER SUPPLY : 110 - 230 VAC
(90 - 260 VAC, 47 - 63 HZ)

POWER CONSUMPTION : WITHOUT PLUG IN MODULES: 6 W
MAX. NUMBER OF MODULES: +9 W

POWER FAILURE BRIDGING : $\geq 150\text{MS}$ AT $\geq 180\text{VAC}$

CONFIGURATION : MAN TURBO SPECIAL

GENERAL DATA:

OPERATING TEMPERATURE : 0 .. +50 °C

STORAGE TEMPERATURE : -20 .. +70 °C

RELATIVE HUMIDITY : < 75%

EMC : ELECTROMAGN. COMPATIBILITY ACC. EN

PROTECTION : FRONT PLATE : IP 65
: CASE : IP 00
: TERMINALS : IP 20

DIMENSIONS : 72 X 144 X 272 MM

PANEL CUTOUT DIMENSIONS : 68 X 138 MM

WEIGHT : 1 KG, WITHOUT MODULES

ELECT. CONNECTORS : PLUG IN SCREW TERMINALS, 1.5 MM²

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INSTRUMENT SPECIFICATION



PLUG IN MODULES FOR PROTRONIC 550

PLUG IN MODULES / ABB NORMELEC

ANALOG INPUT MODULE

MAT.-No. : 10024306

QUANTITY : 2

TYPE : AE4_MA_MUS
4 x MA, WITH OR WITHOUT TRANSMITTER
POWER SUPPLY (ADJUSTABLE VIA
JUMPER SETTINGS)

ORDER No. : 62619-4-0346441

NUMBER OF INPUTS : 4 INPUTS 0/4..20 MA,
SWITCHABLE 0/2..10 V

INPUT RESISTANCE : 50 Ω

TRANSMITTER FEED : 20 V / 82 MA

IDENTIFICATION CODE : C

LOCATION : SLOT 1

ANALOG INPUT MODULE

MAT.-No. : 10305683

QUANTITY : 1

TYPE : AE2_PT_3/4L
2 x PT 100, IN 3- OR 4-WIRE
TECHNOLOGIE-

ORDER No. : 62619-4-0346281

NUMBER OF INPUTS : 2 INPUTS PT 100

INPUT RANGE : 0 - 400 Ω

WIRE RESISTANCE : 0 - 125 Ω , (EACH WIRE)

RANGE ADJUSTABLE : -200 - + 200 $^{\circ}\text{C}$
-200 - + 450 $^{\circ}\text{C}$
-200 - + 800 $^{\circ}\text{C}$

IDENTIFICATION CODE : G

LOCATION : SLOT 3

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INSTRUMENT SPECIFICATION



INTERFACE MODULE

MAT. -No. : 10040423
QUANTITY : 2
TYPE : PROFIBUS DP (SLAVE)
ORDER No. : 62619-0346470
IDENTIFICATION CODE : Z
LOCATION : SLOT 5

BINARY OUTPUT MODUL

MAT. -No. : 10024364
QUANTITY : 2
TYPE : BA4_REL
ORDER No. : 62619-4-0346263
NUMBER OF RELAIS : 4 RELAIS WITH NO CONTACTS,
WITH BUILT IN SPARK QUENCHING
VOLTAGE : MAX. 250 VAC / 1 A
IDENTIFICATION CODE : T
LOCATION : SLOT 6

ACCESSORY TO INTERFACE MODULE

MAT. -No. : 10040424
QUANTITY : 2
TYPE : BUS TERMINATION ADAPTER
ORDER No. : 62619-0346488

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