KD 100-1A

KD 100-1A PA

KD 100-1A MAPY

Electronic flow control system for modified atmospheres for flowwrap machines in the food industry and for room atmospheres e.g. for the storage of fruit and vegetables.

Cost Reduction
- saves up to 30% of gas consumption by automatic controlling the required residual oxygen level to a pre determined set point
- the non-destructive gas analysis guarantees quality of the packages and economy of the production

Easy Operation
- simple calibration
- low maintenance
- easy to read display
- integrated data logger
- USB connection for file transfer
- administration of product names
- user management for measurement personalisation

Additional Features for Version with MAPY
- simple to operate via touch-screen
- ethernet connection for network integration
- measured data storage
- user level with different access authorisation
- user definable settings for each different product i.e. set point, alarm limits etc.

High Process Reliability
- data log
- permanent control of the O_2-concentration
- electronic control of the sample gas to the sensor
- lockable transparent door for protection of settings
- alarm signals are given if the set limits are exceeded and a potential free contact operates to e.g. auto-stop your machine to avoid quality problems
- independent of pressure fluctuations in the gas supply
- independent of packing speeds (MAP)
- independent of package sizes (MAP)

Maximum Hygiene
- splash-proof, robust stainless steel housing
- smooth and easy to clean surface

Documentation
- Interfaces for the documentation and remote transfer of the settings and measured values

Options
- software WITT GasControl-Center for recording of results (see separate data sheet)
- fully automatic calibration (MAPY)
- bar code scanner for product names or user selection (MAPY)
- additional memory (MAPY)
- sample measurement via needle - also with additional sensor (MAPY)

Please identify the individual gases and control ranges of flow at the time of enquiring!

Product Information

GAS FLOW CONTROLLER

Type	KD 100-1A PA, KD 100-1A MAPY
Gases	N_2, CO_2, Ar or others as well as their mixtures; not for flammable gases!
Measuring system	zirconia measuring cell for O_2
Measuring range	0 – 100% *
Life time	no limited
Repeatability	±0.1%
Accuracy	±0.3% of the required O_2 value
Gas inlet pressures	see table
Gas outlet pressure	see table
Output (air)	see table
Temperatures (gas/environment)	0 – 40 °C (+32 °F to +104 °F)
Gas connections	
inert gas	G 3/8 with cone seat, hose nipple 8 mm
analysis gas (lance)	PK 6/4
analysis gas (needle)	PK 6/4 (MAPY)
purge air	PK 6/4
calibration gas	PK 6/4 (fully automatic calibration MAPY)
Inlet pressure analysis	max. 0.3 barg
Alarm contacts	2 potential free contacts for min. and max. settings O_2
Interfaces	
PA	RS 232 with ASCII-output of date, time, measured value analog output 4-20 mA or 0-10 V
MAPY	USB by memory stick for profiles, product and user data RJ45 Ethernet FTP-Server for profiles, product and user data, software update, analog output 4-20 mA or 0-10 V
Data log	
PA	500 measurements (circulating storage)
MAPY	620 measurements, 120 products, 60 users additional max. 2 GB SD-memory card
Housing	stainless steel, splash proof
Weight	approx. 16 kg
Dimensions (HxWxD)	approx. 230 x 380 x 550 mm (9.05 x 14.96 x 21.65 inch) (with connections)
Voltage	230 V AC, 110 V AC, 24 V DC
Power consumption	230 V AC / 0.4 A
Approvals	Company certified according to ISO 9001:2000, ISO 14001 and DIN EN ISO 22000 CE-marked according to: - EMC 2004/108/EC - Low Voltage Directive 2006/95/EC

Flow (in Nl/min) in relation to air

min. inlet pressure in barg (max. 13 bar)	outlet pressure in barg 1	2	3	4	5	6
4	69	-	-	-	-	-
5	128	80	-	-	-	-
6	193	143	87	-	-	-
7	256	216	157	95	-	-
8	326	280	230	171	106	-
9	388	356	319	252	193	144

* no recommend for measures between 20% – 22%

Technical Data

B01/J0 subject to change