








Völkel® PLCs - hardware overview

	BLM	HGX	HGY	BrainBox®	MGD display
Völkel programmable logic controllers for mobile applications. Can be programmed with the standard IEC 61131-3 programming system CoDeSys					
Dimensions in mm	152 x 150 x 56	152 x 150 x 56	152 x 150 x 56	188.5 x 160 x 52	139 x 139 x 37
Weight	650g	650g	700g	1050g	680g
Surrounding temperature	-40 ... 85°C	-40 ... 85°C	-40 ... 85°C	-40 ... 85°C	-20 ... +70 °C
Aluminium housing protection categories	IP 65, IP 69K	IP 65, IP 69K	IP 65, IP 69K	IP 65, IP 69K	IP 65
Connections	AMP, 42 pin	AMP, 42 pin	AMP, 42 pin	AMP, 70 pin	2 x M 12 x 1, 5 pin
Microcontrollers	C167CR, 10MHz	C167CR, 25MHz	C167CS, 40MHz	XC167CI, 40MHz	XC167CI, 40MHz
Safety microcontrollers	----	----	C505CA 16MHz	2x XC167CI, 40MHz	----
FLASH program memory in Kbytes	512	1024	1024	1024	1024
RAM data memory in Kbytes	128	512	512	1024	1024
Parameter memory: EEPROM in Kbytes	8	32	8	32	32
Interfaces: RS232, CAN	1x, 1x	1x, 1x	1x, 2x	1x, 2x	1x, 1x
Supply voltage	5 ... 32V	8 ... 32V	8 ... 32V	8 ... 32V	8 ... 32V
Current consumption at 24V	Approx. 80mA	Approx. 60mA	Approx. 160mA	Approx. 190mA	Approx. 70mA
Digital switch inputs	12	8	9 + [12]*	16 + [8]*	----
Frequency inputs	+ [1]*	2	4 + [6]*	8	----
Analogue inputs 0 ... 10V	----	4 + [2]*	4 + [4]*	8 + [8]*	----
Analogue inputs 0 ... 20mA	----	2	4	[8]*	----
Switch outputs (per maximum load)	18 (4 A, Σ 25A)	2 (2A) + [4 (3A)]*	4 (3A) + [6 (3A)]*	[16 (3A)]*	----
Proportional outputs (per maximum load)	----	4 (3A)	6 (3A)	16 (3A)	----
Sensor supply	----	1 (5V)	1 (5V / 8V)	2 (0 ... 10V)	----
Special features	Standby operation, safety relay		Safety microcontroller, safety relay	Safety Integrity Level 2 (IEC 61508)	8 keys, 128 x 128 pixel (0.5mm) LCD, field of vision size 73 x 73mm

+ []* can be used if other inputs/outputs are reconfigured using software

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