SIEMENS

Data sheet 6GF3420-0AA20

product type designation

MV420 SR-B code reader

SIMATIC MV420 SR-B; Base model Compact optical reader for 1D and 2D codes; IP67



suitability for operation	1D codes: Int. 2/5, Code 128, Code 39, EAN 13, EAN 8, UPC-A, UPC-E, GS1, 2D codes: DMC, PDF417 (without: Truncated, Micro and Macro), QR (without: Micro and Macro), Vericode
interfaces	
type of electrical connection	
• of Industrial Ethernet interface	M12, d-coded
• of the RS 422 interface	M16, 12-pin, male
• of the RS 232 interface	M16, 12-pin, male
• for supply voltage	M16, 12-pin, male
• at the digital inputs/outputs	M16, 12-pin, male
number of digital inputs	3
number of digital outputs	3
digital input version	1 high-speed trigger input, 2 opto-isolated inputs (NPN, PNP capability) optionally as output
digital output version	1 high-speed strobe output for external lighting, 2 isolated outputs optionally as input, short-circuit-proof, max. 100 mA
optical data	
design of image sensor / of the camera	CMOS chip, VGA (640 x 480), WVGA (752 x 480)

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type of image capture	Global shutter
range	10 ... 400 mm
range / note	Adjustable within the range
fastening method / of lens	Fixed (M12)
type of light source	Integrated lighting or external lighting according to accessories list
picture recording frequency / maximum	50 Hz
code reading rate / maximum	29 1/s
type of focusing	Manual adjustment on the lens cover

supply voltage, current consumption, power loss	
supply voltage	
• at DC / rated value	24 V
• at DC	19.2 ... 28.8 V
consumed current / at DC / at 24 V	
• typical	0.17 A
• maximum	2 A
buffering time / in the event of power failure / minimum	0.01 s

mechanical data	
material	Die-cast aluminum
color	petrol blue

ambient conditions	
ambient temperature	
• during operation	50 °C
• during storage	-30 ... +70 °C
• during transport	-30 ... +70 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP67
shock resistance	According to IEC 60068-2
shock acceleration	150 m/s²
vibrational acceleration	10 m/s²

design, dimensions and weights	
width	52.5 mm
height	70.7 mm
depth	39.5 mm
net weight	0.25 kg
fastening method	2 x M4 screws

product features, product functions, product components / general	
display version	4 LEDs
protocol / is supported / Media Redundancy Protocol (MRP)	No

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product function / of the PROFINET IO device / is supported / H-Sync forwarding	No
protocol / is supported	
• LLDP	Yes
• PROFINET IO protocol	Yes
• TCP/IP	Yes
• SNMP v1	Yes
• SNMP v2	No
• SNMP v3	No
• DCP	Yes
• EtherNet/IP protocol	No
• OPC UA	No
product feature / silicon-free	Yes

standards, specifications, approvals

certificate of suitability	CE, KCC, F&B suitable, UL
MTBF	95 y

accessories

accessories	Mounting brackets, built-in ring lamps, M12 lenses

further information / internet-Links

Internet-Link	
• to website: Selector TIA Selection Tool	https://support.industry.siemens.com/cs/ww/en/view/67384964
• to website: Industrial communication	http://www.siemens.com/codereader
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx-Download-Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

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