

Motor Driven Card Reader/Writer

3S4YR-MVF/MVS

Reliably Handles Read/Write Functions for both Magnetic and IC Cards

- Downloadable firmware for specification updates, customer requirements, firmware updates, new smart card support
- Powerful all-roller card feeding system easily handles warped and/or wet cards
- Highly reliable reading/writing of all three tracks using new pick-up encoder technology
- Fully-integrated RS-232C eliminates the need for IC adapter boards
- User-friendly interface with multifunction commands and support for T=0 and T=1, EMV
- Compact size and light weight for easy installation
- Locking shutter for fraud prevention

Ordering Information

Magnetic Tracks Supported (R, R/W)			IC	Interface	Built-in	Card					
1	2	3	Center	JIS II	Contact	(see note 3)	Shutter	Ejection	Color	Notes	Part Number (see note 2)
R/W	R/W	R/W	_	—	No	RS-232	Yes	Front/Rear	Black	-	3S4YR-MVFW1D-052
R/W	R/W	R/W	Ι	—	ISO 7816	RS-232	Yes	Front/Rear	Black	—	3S4YR-MVFW1JD-051L
R/W	R/W	R/W	_	_	ISO 7816	RS-232	Yes	Front/Rear	Black	Memory card support (see note1)	3S4YR-MVFW1JD-M51L
R/W	R/W	R/W	—	_	ISO 7816	RS-232	Yes	Front/Rear	Black	HiCo	3S4YR-MVFW1JDH-074
R/W	R/W	R/W	—	—	No	RS-232	Yes	Front/Rear	Black	—	3S4YR-MVS1D (MVFW1D-052 Core)
R/W	R/W	R/W	—	—	ISO 7816	RS-232	Yes	Front/Rear	Black	Housing	3S4YR-MVS1JD (MVFW1JD-051L Core)

Note 1: Inquire regarding specific memory card support.

- 2: Models with support for SAM modules are available. Please contact Omron for details.
- 3: Please contact Omron for details concerning USB interface availability.

■ TYPICAL APPLICATIONS

- Cash Dispensers
- Automatic Teller Machines (ATM)
- POS Terminals
- Credit Card Checkers
- ID Card Checkers
- Electronic Lock System
- Medical Patient System
- Health Control System
- •Teller Terminal
- Front desk card encoders

Specifications.

Part number		3S4YR-MVF	3S4YR-MVS			
Recommended card	Magnetic card	ISO 7810, 7811/1-5, 7812, 7813. Please inquire if using high-coercivity cards.				
type	IC card (see Note 1)	ISO 7816/1-4 (T=0 and/or T=1)				
Recording method		FM decoding (F2F)				
Card feeding speed		20 cm/sec (8 in/sec) in normal operation; 5 cm/sec (2 in/sec) IC card handling				
Location of magnetic s	stripe	Installation	At bottom			
Motor type		DC motor				
Service life (see note 2)	Entire unit	1,500,000 passes or 5 years, whichever comes first				
	IC contact	300,000 times				
Operating power supp	bly	$24 \text{ VDC} \pm 10\%$	100 VAC to 240 VAC (± 10%)			
Current consumption		2.0 A or less when motor revolution starts; 500 mA in standby mode				
Mounting location		Indoors — away from wind, rain, and sunlight				
Ambient temperature	Operation	5° to 55°C (41° to 131°F)	0° to 40° C (32° to 104°F)			
	Storage	-25° to 55°C (-13° to 131°F)	-25° to 55° C (-13° to 131°F)			
Ambient humidity	Operation	5% to 85% RH, no condensation	35% to 85% RH, no condensation (see note 3)			
	Storage	5% to 90% RH, no condensation	5% to 90% RH, no condensation (see note 3)			
Vibration		10 to 150 Hz and single vibration width of 0.15 mm or an acceleration of 2 G (19.6 m/sec ²), whichever is smaller				
Shock		20 G in six directions (up and down, left and right, forward and back, 3 times in each direction)				
Dimensions (with shut	ter)	210L x 124W x 90H mm (8.27L x 4.88W x 3.54H in)	271L x 130W x 154H mm (10.67L x 5.12W x 6.06H in)			
Weight		Approx. 2 kg (4.41 lbs)	Approx. 4.5 kg (9.92 lbs.) without attachment			

Note 1: Please request confirmation on specific IC card compatibility, including EMV (Europay / Mastercard / Visa) and memory cards.

2: One pass denotes one round trip.

3: Absolute air humidity in operation is 23 g/m³ or less. In storage, absolute air humidity is 40 g/m³ or less.

Engineering Data_

■ I/O INFORMATION

RS-232C Interface automatically recognizes data transmission speeds of 1200, 2400, 4800, 9600, and 19200 baud.

3S4YR-MVFW1JD RS-232C Interface

Card reader side: JAE 9-pin D-Sub socket, DELC-J9SAF-10L9.

Pin #	Signal	Input/Output	Description
1	NC	—	Not connected
2	RXD	Input	Receive data
3	TXD	Output	Transmit data
4	DTR	Output	Data terminal ready
5	GND	—	Ground
6	NC	—	Not connected
7	NC	—	Not connected
8	CTS	Input	Clear to send
9	NC	_	Not connected

3S4YR-MVFW1JD Power Interface

Card reader side:

Molex 4 node, 2.54 mm pitch in serial 5046-04A.

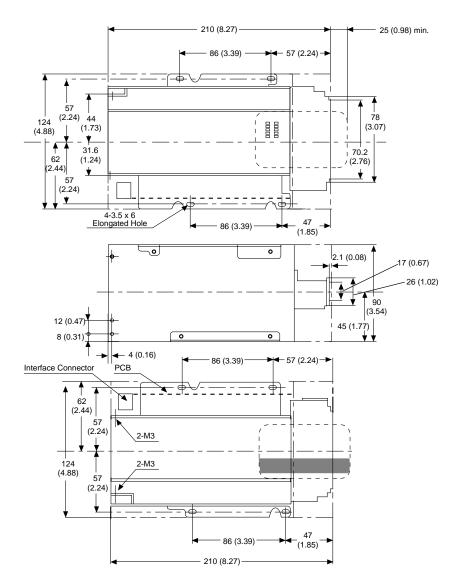
Pin #	Signal	Input/Output	Description
1	+24V	—	Power supply
2	GND	—	Power ground
3	XGND	—	Secondary power ground
4	X24V	_	Secondary supply

Dimensions

Unit: mm (inch)

■ 3S4YR-MVF with shutter

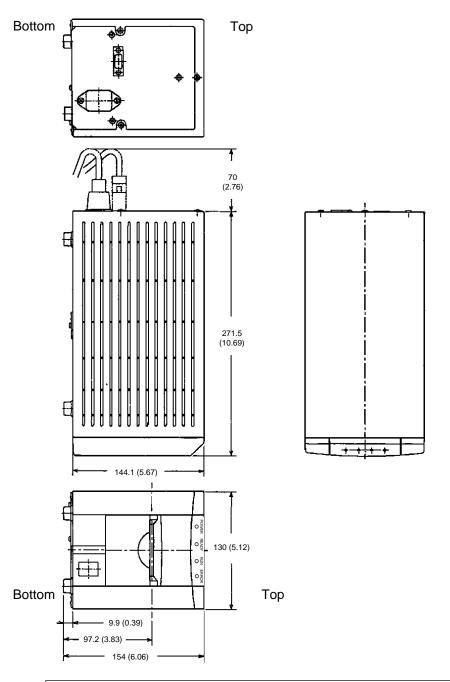
(Also available without shutter.)



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■ 3S4YR-MVS

Unit: mm (inch)



NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.



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Cat. No. GC CR3

Specifications subject to change without notice.

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