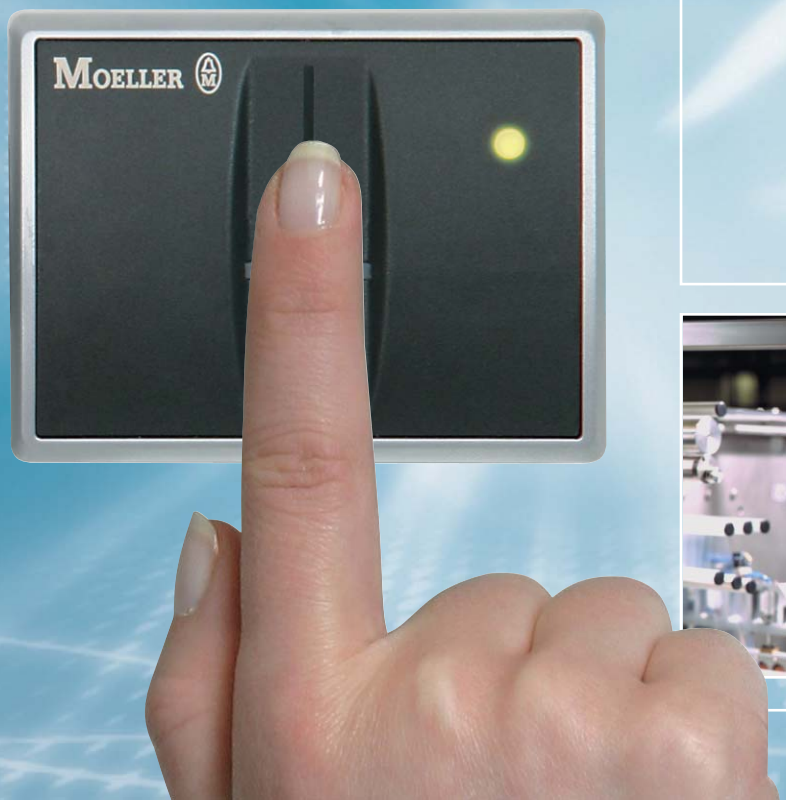
Scan, recognise, enable – ESA-M22 fingerprint system



xCommand

Command and signalling – ergonomic shape, attractive design. Switching control circuit currents reliably and precisely.

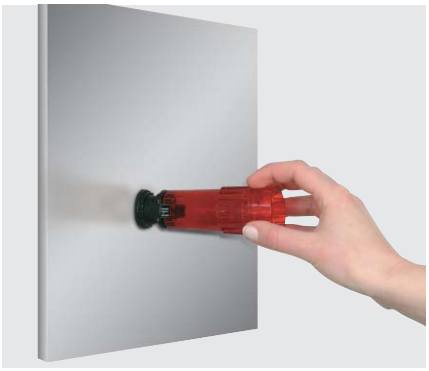
RMQ command and signalling devices
Fingerprint system
FAK foot and palm switches
LS-Titan position switches
T/P rotary switches
ETR timing relays
EMR measuring relays
ESR safety relays

Product Information
Fingerprint system

MOELLER

Think future. Switch to green.

The ID card in your finger
The M22-ESA fingerprint system



Lost your keys, misplaced your ID card or forgotten your PIN code? In addition to the annoyance caused by these everyday problems, the "conventional" access systems cost companies a vast amount in administration costs. The M22-ESA fingerprint system which acts as an electronic master lock system for machines, systems and buildings, fully eliminates these administrative costs. Fingerprints are unique, cannot be lost and can be precisely assigned to a particular person. The M22-ESA fulfils all the demands for a simple, safe and flexible access control system.

Easy to fit:

1. The M22-ESA requires just as the RMQ-Titan series devices, a standard 22.3mm diameter fitting aperture.
2. Fit the operating panel using the patented Moeller tool.
3. Simple fitting of the M22-ESA fingerprint system on the operating panel.
4. The fingerprint system is fitted

Fast installation:

The installer simply fits the control electronics from the rear onto the sensor, connects the 24 V DC power supply and wires the relay output (changeover contact up to 8A/250 V AC).

Simply more secure

The security benefits of the M22-ESA series are based on the uniqueness of biometric features. A person's fingerprint does not change in the course of his lifetime just as the characteristics of his fingerprint cannot be transferred to third parties. Different persons simply don't have the same fingerprint; even the fingerprints of twins are unique.
Administrative costs which result from loss or forgetfulness with conventional access control systems are completely eliminated. The thermal line sensor of the M22-ESA recognises authorized persons via the minutiae of the finger print, by live recognition (temperature measurement) and the limitation of the evaluation area (possibility of saving just a certain section of the fingerprint) so that imitation is made even more difficult. The system saves up to 100 different fingerprints.

How it works:

The ergonomically designed M22-ESA fingerprint reader is based on the so-called infra-red method. It generates a fingerprint using thermo sensors, which measures the temperature differentials between finger ridges and spaces between the ridges and forms a digital image. This is compared with the fingerprint stored in the database of the MFD-Titan and access is either authorized or denied.

Fast commissioning:

1. The user selects the Learn menu option on the MFD-Titan

2. The MFD-Titan recognizes the M22-ESA fingerprint and requests pulling the finger across the sensor in order to learn the fingerprint. The authorized person now pulls his finger three times across the read surface of the fingerprint sensor.

3. The **Successful** message on the display of the MFD-Titan indicates that the device has saved the fingerprint and has registered the authorized person.

4. A green LED on the fingerprint reader indicates access authorization. When all access authorized fingerprints are saved, the installer removes the MFD-Titan. Only a single MFD-Titan is required for commissioning of multiple fingerprint systems, which saves costs and time due to easy data storage.

Technical Data

General			
Dimensions	Front section	WxHxD	65 x 50 x 16 mm
	Basic device	WxHxD	76 x 60 x 35 mm
	Installation depth		45 mm
Weight			130g
Mounting			2 x 22,5 mm display is screwed on using two ring fasteners
Environmental conditions			
Operating ambient temperature			0 - 60°C
Storage/transport temperature			-20 - 70°C
Relative humidity			5 - 95%, no moisture condensation
Degree of protection (IEC60529)	Front section		IP 65
	Basic device		IP 20
Voltage supply			
Rated operating voltage		Ue	24V DC (+10%/-15%)
Residual ripple			≤ 5%
Rated operational current			max. 0.2A
Power dissipation			at 24 V 5W
Relay output			
Number and type of contacts			1 changeover contact
Rated current			6A
Rated voltage			250V AC
Insulation strength			
Rating of the creepage and air gaps insulation strength			EN50178,UL508, CSA22.2 No142
General			
Sensor type			Thermal lone sensor
Detection			Finger, minutiea (finger arches, loops and whorls)
Live recognition of the finger			Yes
Max. number of saved finger data sets			100
Output signal with positive recognition			Changeover contact switched to suit the setting between 1-10 sec
Standard settings			
Low			1 sec.
Med			2 sec.
Hi			3 sec.
The sensor function can be influenced by humidity or dirt			

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