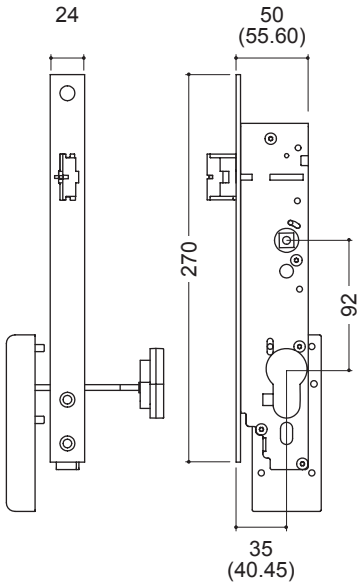
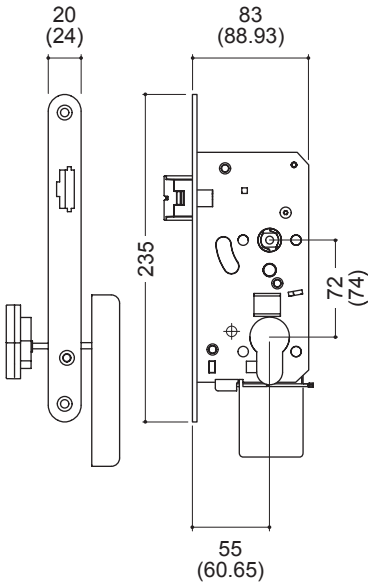
eLOCK eXpert **APS Comfort system**

Frame door lock
in acc. DIN 18251-Part 2



Timber door lock
in acc. DIN 18251-Part 1



Technical data (Hardware)

Power supply — 1 x 3V CR-V3 Lithium battery

Battery working life — Operational readiness up to 3 years, at 10 locking transactions a day
Total number of locking transactions: Up to 70,000
Stand by time: Up to 5 years

Emergency opening — **Electronic:** For a once-only coupling of the door handle with the device
External power supply (if the battery is empty)

Data retention in the event of power outage — Unlimited buffering of event memory

Time — Accuracy under normal usage: +/- 9 minutes/year
Automatic daylight saving time switching

Interface — NFC interface, in accordance with ISO 14443A

Deployment area — Standard doors, fire protection doors and emergency exit and escape route doors.
In combination with door handles with split square (lock with divided follower).

Deployment conditions — Interior doors
Exterior doors if the electronics are installed in a protected interior area.

Protection class (DIN EN 60529) — IP54 – Exterior
IP41 – Interior

Operating temperature — 0 °C to +55 °C

Storage temperature — –20 °C to +60 °C

Relative humidity — (operation/storage) max. 95 % without condensation

Read distance — up to 15 mm, depending on the construction of the transponder

Approvals, Norms and Directives

- CE conformity
- RED Directive 2014/53/EU
- RoHS Directive 2002/95/EG
- DIN EN 179 — Locks and building hardware – Emergency exit locks with handle or push pads for escape route doors
- DIN EN 1125 — Locks and building hardware – Panic locks with horizontal operating bars for emergency exit doors
- DIN 18251 Part 1 – Mortise locks for folding doors
- DIN 18251 Part 2 – Mortise locks for frame doors
- VdS – Mechanical locks, tested and approved by the VdS
- Lock resistance, in acc. DIN 18251 Class 4: Increased break-in resistance and high frequency of use

Deployment in fire-protection doors

When deployed in fire-protection doors, door handles compliant with DIN 18273 FS are to be used, which have been tested and approved with the following locks:
– B2170 lock from the BKS Company (Timber door)
– B1970 lock from the BKS Company (Frame door)

Options

APS Comfort system
For timber doors

Electronic, self-locking anti-panic lock for timber doors in combination with handle fittings with a fixed pivoted bearing in the rosette, with split handle spindle, 9 mm spindle

	Standard	fire protection	mechanical locking option
Single-leaf	●	●	●
Double-leaf	○	○	○

APS Comfort system
For frame doors

Electronic, self-locking anti-panic lock for frame doors in combination with handle fittings with a fixed pivot bearing in the rosette, with split handle spindle, 9 mm spindle

	Standard	fire protection	mechanical locking option
Single-leaf	●	●	●
Single-leaf, top locked	○	○	○
Double-leaf	○	○	○
Double-leaf, top locked	○	○	○

● available ○ on request

Lock configuration	Frame door lock	Timber door lock
Spindle	9 mm	9 mm
Follower	divided	divided
Bolt length	35, 40, 45 mm	55, 60, 65 mm
Distance	92 mm	72 mm
Face plate shape	Rectangular, U-plate	round
Face plate width	24 mm	20, 24 mm (28 mm on request)
Face plate length	270 mm	235 mm
DIN direction	Right, Left	Right, Left
Direction of opening	Inwards, Outwards	Inwards, Outwards
Antenna cap colour	99 (Pure white)	99 (Pure white)
	90 (Deep black)	90 (Deep black)
	95 (Stone grey)	95 (Stone grey)
	92 (Anthracite grey)	92 (Anthracite grey)

Surface finishes	**Covering cap**	Stainless steel (other finishes on request)
	Face plate	Stainless steel
	Antenna caps	Polyamide, in the four colours 99 (Pure white), 90 (Deep black) 95 (Stone grey), 92 (Anthracite grey)

Technical data (System)

System administration — OPERTIS eLOCK eXpert

signalling — **optical** through LEDs (red, green, blue, yellow); **acoustic** through a buzzer (Can be activated/ deactivated for each APS Comfort system through the OPERTIS eLOCK software)

Event memory in the device — Ring buffer the last 10,000 accesses

Coupling duration — Exterior: 3 - 1800 seconds, adjustable through the eLOCK eXpert software
Interior: Permanently coupled, emergency exit function

Transponder technology — MIFARE® DESFire®

Memory requirements per transponder
- 2K – S – small locking – max. 154 locking rights
- 4K – M – mid-sized locking system – max. 666 locking rights

System sizes

across the system
– 250,000 Transponders
– 65,000 End devices
– Unlimited persons
– Unlimited end device groups (as a tree structure with a depth of ≤ 20 levels)
– Unlimited locking groups
– Unlimited person time profiles
– Unlimited end device time profiles
– Unlimited public holiday dates

Per end device
– 250,000 Transponders
– 20 End device groups (max. Depth of the tree structure)
– Unlimited locking groups
– Unlimited person time profiles
– 1 Device time profile
– 512 Public holiday dates
– Logging of the last10,000 accesses (ring buffer)

Per transponder
– Locking rights (end devices, end device groups): 154 with small locking systems
666 with mid-sized locking systems, in acc. with the defined size of the locking system
– 6 Individual time profiles
– 1 Fixed time profile “Always”
– Unlimited public holiday dates
– 5 blacklist entries (lost transponders of the entire locking system),
for blocking at the end devices (ring buffer)
– 20 System/ battery messages (battery low) from the offline end devices (ring buffer)
– Max. 3 eLOCK eXpert locking systems (applications)

Per end device group
– 250,000 Transponders
– Unlimited locking groups

Per locking group
– Locking rights (end devices, end device groups): 154 with small locking systems
666 with mid-sized locking systems, in acc. with the defined size of the locking system
– Unlimited persons

Programming

All locking rights are programmed in the OPERTIS eLOCK eXpert software.
All pending programming tasks are listed in the ToDo menu.
Data transfer can be done selectively over:

- OPERTIS NFC Stick in combination with the OPERTIS eLOCK eXpert software (at end devices and transponders)
- OPERTIS ToDo Card (at end devices)
- The computer network, online (at wall scanners with online licence)
- Wall scanners with online licence (updating the transponder)

Time profile

Person time profile – Defines the validity period of the transponder
End device time profile – Defines the timepoint (open/close or only close) for the automatic activation/deactivation of Office mode
One time profile consists of a maximum of 10 slots. Each slot defines a timepoint (from/till) and the corresponding weekdays and special days.

Office mode

Special operating mode: Serves to be able to open a door with authorisation checking, e.g. for opening a door during the working day to allow public access
Activation/deactivation is done through a special routine directly at the end device and is reserved for transponders for which this additional authorisation has been released.

Fire service mode

is activated exclusively when a fire service transponder is used. If an end device is in fire service mode, the door can be opened without presenting a transponder. Fire service mode is always indicated through a yellow light signal, irrespective of how signalling is defined in the software. Fire service mode is always activated through the authorisation check when a fire service transponder is presented.

Ticket transponder

the validity is limited (1 - 8,760 hours) and is activated the first time it is used.
A ticket transponder can be released for 24 hours, for example, from the first usage.
Each transponder belonging to a locking system can be programmed as a ticket transponder, through a special programming routine.

Available end devices

Wall scanner

– For doors with automatic control. The wall controller sends a triggering signal, e.g. to the automatic door, car park barrier, elevator door or electric door opener
– Interior or exterior deployment, depending on components used
– The wall scanner can use the software's online functions through an online licence. For example, transponders can be updated through a wall scanner with an online licence

Knob cylinder and half-cylinder

– Simple and quick installation
– Modular construction for extra flexibility, e.g. simple, retrospective extension
– Knob cylinders can be deployed on internal and external doors
– Large number of options, e.g. APS, with a defined position of the locking lug for doors in escape and rescue routes, FZG, with freewheel function for gear locks in escape door locks, Waterproof, for outdoor use or fire protection (120 minutes).

Lever Cylinder

– for thin-walled doors on mailboxes, control cabinets and similar closures that can be closed on one side.

Comfort system APS

– Convenient handling
– Attractive design, through the minimalist design of the antenna caps
– Can be discreetly integrated into any building design
– Opening is done by simply presenting an authorised transponder
– for internal and external fire protection doors and emergency exit and escape route doors

Ordering information (system-dependent)

APS Comfort system for frame doors

ES326.1000E	APS Comfort system for single-leaf frame doors
ES326.1001E	APS Comfort system for single-leaf fire-protection frame doors
on request	APS Comfort system for double-leaf frame doors
on request	APS Comfort system for double-leaf fire-protection frame doors
on request	APS Comfort system for frame doors, mechanically lockable
on request	APS Comfort system for frame doors, top lockable

APS Comfort system for timber doors

ES326.1010E	APS Comfort system for single-leaf timber doors
ES326.1011E	APS Comfort system for single-leaf fire-protection timber doors
on request	APS Comfort system for double-leaf timber doors
on request	APS Comfort system for double-leaf fire-protection timber doors
on request	APS Comfort system for timber doors, mechanically lockable

Price supplements

on request	Supplement for timber door lock with bolt length 80
on request	Supplement for timber door lock with bolt length 100
on request	Supplement for frame door lock with Schüco face plate, Foster or 6 mm U face plate

Accessories

on request	Replacement face plate with top lock for timber doors
ES0893	CRV3 3V Lithium battery (for APS) Comfort system)
ES306.1005	External 3 V power supply for Comfort systems
on request	PZ Rosette for mechanical locking, on request

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