ORDER DATA

Part.-No.

EMB7300 2,5 A 0101 683020-0101

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 115 W

Output voltage: 24 V DC (20 – 28 V DC / 2 Vpp)

Output current: 2,5 A

Ambient temperature range: $-5^{\circ}\text{C} \dots + 40^{\circ}\text{C}$

Protection rating: IP30

Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 225 x 285 x 122 mm

Connection terminals: 1,5 mm² / drive line: 4 mm² (rigid wire)

VdS certification no.: G 514001 (without or with orange RWA button)

Motherboard: 1 RWA group / 1 Vent groups

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below / behind
- Optional housing for flash mounting
- Prepared for 2 maintanance-free back-up batteries 2x 12 V / 2,3 Ah (Part. Nr. 541000)

OPTIONS					
Version with break-glass unit (HSE) and ventilation button on the front of the housing			PartNo.		
EMB7300 2,5 A 0101-T	HSE red	(similar to RAL 3000)	683021-0101		
EMB7300 2,5 A 0101-T	HSE yellow	(similar to RAL 1018)	683022-0101		
EMB7300 2,5 A 0101-T	HSE grey	(similar to RAL 7035)	683023-0101		
EMB7300 2,5 A 0101-T	HSE blue	(similar to RAL 5009)	683024-0101		
EMB7300 2,5 A 0101-T	HSE orange VdS certification	(similar to RAL 2011) no.: G 514001	683025-0101		

ORDER DATA

Part.-No.

EMB7300 5 A 0101 683050-0101

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 460 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 5,0 A

Ambient temperature range: -5°C ... + 40°C

Protection rating: IP30

Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 225 x 285 x 122 mm

Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001 (without or with orange RWA button)

Motherboard: 1 RWA group / 1 Vent group

Feature/Equipment

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below / behind
- Optional housing for flash mounting
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 2,3 Ah (Part. Nr. 541000)

OPTIONS					
Available with brea kglass unit and, ventilation button on housing cover			PartNo.		
EMB7300 5 A 0101-T	HSE red	(similar to RAL 3000)	683051-0101		
EMB7300 5 A 0101-T	HSE yellow	(similar to RAL 1018)	683052-0101		
EMB7300 5 A 0101-T	HSE grey	(similar to RAL 7035)	683053-0101		
EMB7300 5 A 0101-T	HSE blue	(similar to RAL 5009)	683054-0101		
EMB7300 5 A 0101-T	HSE orange VdS certification	(similar to RAL 2011) no.: G 514001	683055-0101		

EMB7300 5 A 0102 683050-0102

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 460 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 5,0 A

Ambient temperature range: −5°C ... + 40°C

Protection rating: IP30

Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 225 x 285 x 122 mm

Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001

Motherboard: 1 RWA group / 2 Vent groups

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below / behind
- Optional housing for flash mounting
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 2,3 Ah (Part. Nr. 541000)

(2,5 A)

5 A

ORDER DATA

Part.-No.

Flush mounting housing EMB7300 2,5 A / 5 A 683111

Application: Housing for flush mouting of EMB7300 2,5 A or 5 A in its own housing 225 x 285 x 122 mm.



TECHNICAL DATA

Material: Steel sheet
Colour: RAL 7035 (light grey)

Flush housing:
Dimensions (WxHxD): 254 x 314 x 96 mm

Plaster frame:
Dimensions (WxHxD): 282 x 342 x 48 mm

PE-Connecting cable: 160 mm with blade terminals 6,3 mm

Polystyrene plate: 240 x 302 x 93 mm

Feature/Equipment

- Plaster frame with 4x rounded head screws M3x6, 4x plain washer A4
- Flush housing with 4x screw sleeve and safety nuts M5, 4x stainless steel mounting brackets 13 x 13 x 1 mm, 8x Tapping screws ST3, 5x6,5
- Polystyrene plate to avoid damage during plastering of the wall

Accumulator battery holder	69	22
Accumulator pattery holder	ნგ.	37

Application: Holder to fix the Back-up batteries 12V / 2,3 Ah within the housing of control units.



TECHNICAL DATA

Material: Steel sheet
Colour: RAL 7035 (light grey)

2,5 A



Feature/Equipment

■ Suitable for EMB7300 2,5 A and EMB7300 5 A

ORDER DATA

Part.-No.

EMB7300 10 A 0101 683010-0101

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 506 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 10 A

Ambient temperature range: -5°C ... + 40°C

Protection rating: IP40

IP54 with alternatively fixing brackets

Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 400 x 300 x 150 mm Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001

Motherboard: 1 RWA group / 1 Vent group

Feature/Equipment

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 7 Ah (Part. Nr. 542000)

EMB7300 10 A 0102 683010-0102

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 506 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 10 A

Ambient temperature range: $-5^{\circ}\text{C} \dots + 40^{\circ}\text{C}$

Protection rating: IP40

IP54 with alternatively fixing brackets
Surface mounting, steel sheet, RAL 7035 (light grey)

Housing: Surface mounting, steel she Dimensions (WxHxD): 400 x 300 x 150 mm

Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001

Motherboard: 1 RWA group / 2 Vent groups

Feature/Equipment

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 7 Ah (Part. Nr. 542000)

EMB7300 10 A 0204 683010-0204

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 506 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 10 A

Ambient temperature range: -5°C ... + 40°C

Protection rating: IP40

IP54 with alternatively fixing brackets

Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 400 x 500 x 200 mm

Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001

2x Motherboard: 2 RWA group / 4 Vent groups

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 7 Ah (Part. Nr. 542000)

ORDER DATA

Part.-No.

EMB7300 20 A 0102 683220-0102

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage,

suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 805 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 20 A

Ambient temperature range: -5°C ... + 40°C

Protection rating: IP40

IP54 with alternatively fixing brackets

Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 400 x 400 x 200 mm

Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001

Motherboard: 1 RWA group / 2 Vent groups

Feature/Equipment

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 7 Ah (Part. Nr. 542000)

EMB7300 20 A 0204 683220-0204

Application: Compact control unit for smoke and heat exhaust ventilation systems operating with 24 V DC voltage, suitable for staircases.



TECHNICAL DATA (Rated values)

Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz)

Max. power consumption: 805 W

Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)

Output current: 20 A

Ambient temperature range: -5°C ... + 40°C

Protection rating: IP40

IP54 with alternatively fixing brackets
Housing: Surface mounting, steel sheet, RAL 7035 (light grey)

Dimensions (WxHxD): 400 x 500 x 200 mm

Connection terminals: 1,5 mm² / Drives: 6 mm² (rigid wire)

VdS certification no.: G 514001

2x Motherboard: 2 RWA group / 4 Vent groups

Feature/Equipment

- Further settings (e.g. maintenance period) only available with extra cost software license
- Cable entry from above / below
- Prepared for 2 maintanance-free backup batteries 2x 12 V / 12 Ah (Part. Nr. 542200)

10 A 20 A

ACCESSORI	ES			
PartNo.		VE		
500001	Wall fixing brackets IP54	4 piece		

ORDER DATA

Part.-No.

WR-Set Type 7x/8x – Wind and Rain Sensor Set

482100

Application: Sensors for wind and rain to work with an evaluation unit WRAG2 or Typ IV, a WM Weather-Module or directly with a

RWA control unit, for closing and blocking the natural ventilation under bad weather conditions.

TECHNICAL DATA (Rated values)

Rated voltage: 24 V DC (+/- 20%)

Rain sensor Type III – heated sensor surface, switch-off delay approx. 5 min. Contact: 1 Change-over switch, max. 48 V / 5A

Current consumption: <150 mA

Housing: Surface mounting, ABS black with stainless steel bracket

Dimensions (WxHxD): 100 x 85 x 172 mm

Connection cable: Non-halogen cable, approx. 4 m
Volt free contac: 1 Change-over switch, max. 48 V / 1A
Wind sensor Type III – Anemometer with 3 impact resistant wind cups (PA6)

Measuring principle: Pulse generator
Dimensions: 250 x 250 x 80 mm

Connection cable: Non-halogen cable, approx. 4 m

Feature/Equipment

 Set including: Wind sensor Type III (Part.-No. 482021), rain sensor Type III (Part.-No. 480210), clamp ring (Part.-No. 515950), aluminium bracket for pole or wall mounting (Part.-No. 482093), without mounting screws

BI-K - KNX Interface LZ1 / LZ6 / EMB 7300

683999

Application: Plug-in card for communication between the controllers Aumüller LZ1, LZ6 and EMB 7300 to the KNX BUS system.



TECHNICAL DATA

Rated voltage: 24 V DC Ambient temperature range: $-5^{\circ}\text{C} \dots + 40^{\circ}\text{C}$

Relative humidity: (no condensate) 5% ... 90% Data points: up to 16 pieces per drive line

BUS current: 9mA

Housing: without (assembled PCB)

Dimensions (WxH): 51 x 42 mm

Connection terminals: 2 x 2 x 0,8 mm (KNX-BUS-Terminal)

Feature/Equipment

- Data of the control (e.g. drive position) are sent on the KNX-BUS.
- The controls received direct orders from the KNX-BUS (e.g. position information, weather data).
- The licensed version of the "EMB compact configurator" required for commissioning.

LON73 683243

Application: Plug-in network card for EMB7300 for connection and integration in LON-networks.



TECHNICAL DATA

Rated voltage: 24 V DC Ambient temperature range: $-5^{\circ}\text{C} \dots + 40^{\circ}\text{C}$

Relative humidity: (no condensate) 5% ... 90% Housing: w/o (assembled PCB)
Dimensions (WxHxD): 40 x 50 x 13 mm

LON-Transceiver: LPT10

Connection terminals: Clamping range 0,6 – 0,8 mm (rigid wire)

(included in delivery)

- Connector for plugging the network card to the motherboard.
- Plastic holder for fixing the plug-in card on the motherboard.
- Configuration of the functional performances of connected control units via LON-Maker or compatible software.
- The licensed version of the "EMB compact configurator" required for commissioning.

OPTIONS			
LON programming			
Programming the LON73 - 2x EMB7300 master / slave	683270		

ORDER DATA

Part.-No.

REL65

Application: Plug-in card for EMB7300 with relay for forwarding the alarm or fault signal to external devices.



TECHNICAL DATA

Rated voltage: 24 V DC
Ambient temperature range: $-5^{\circ}\text{C} \dots + 40^{\circ}\text{C}$ Housing: w/o (assembled PCB)
Dimensions (WxHxD): 20 x 40 x 13 mm

Volt free contac: 1 Change-over switch, max. 48 V / 1A

Connection terminals: 3x 1,5 mm² (rigid wire)

Feature/Equipment

Connector for plugging the relay card to the motherboard

VERSIONS				
PartNo.				
650200	Delivery in parcel	for customer self-installation		
650200-9	Module factory fitted	factory fitted and fully wired		

7xPSB

Application: Plug-in card for EMB7300 for connection and powering of external consumers with 24 V DC voltage.



TECHNICAL DATA

Rated voltage: 24 V DC
Ambient temperature range: -5°C ... + 40°C
Output current: **0,5 A**Housing: w/o (assembled PCB)
Dimensions (WxHxD): 20 x 32 x 13 mm

Connection terminals: Screw terminals 1,5 mm² (rigid wire)
Voltage tap: 2 terminals 24 V DC backup voltage supplied
2 terminals 24 V DC mains voltage supplied

Feature/Equipment

- Connector for plugging the card to the motherboard
- Screw-type-terminal 4 x 1,5 mm²

NOTE: The overall power consumption of connected external consumers is to be considered!

VERSIONS				
PartNo.				
683256	Delivery in parcel	for customer self-installation		
683256-9	Module factory fitted	factory fitted and fully wired		



ORDER DATA

Part.-No.

USB-Cable 683253

Application: USB-Cable for connecting a PC with EMB7300 to configurate basic and special functions.

TECHNICAL DATA



USB-Standard: USB2 Cable length: 3 m

Feature/Equipment

■ Software "EMB-Compact" required!

Accumulators

Application: Maintenance of standby operation of RWA control units over a period of 72 hours of main power supply loss.



TECHNICAL DATA

Type: Lead storage battery
Output voltage: 12 V DC

Capacity: see order data
Lifetime: 4 years (normal conditions)

Connections: 1,2 – 12 Ah: blade terminals 4,8 mm 17 – 38 Ah: screw terminals M5 Housing: plastic, impact- and break-resistent

Feature/Equipment

- Maintenance free operation, long lasting durability, hight charging performance and long-cycle stability
- Disposal due to local, national or international rules (WEEE)

NOTE: Always 2 batteries are required per control unit!

OPTIONS for control units with backup power supply 2,2/2,3 Ah, 12 V 1 Pcs. 541000 7 Ah, 12 V 1 Pcs. 542000

SOFTWARE / LICENSE / PROGRAMMING		
Configuration software for extended scope of functions System Requirements: Microsoft® Windows 7 / Microsoft® Windows 10 64 Bit	PartNo.	
First software license (3 years)	683260	
Follow-up software license (3 years)	683261	
Configuration of customized functions at the factory for one Control Unit	683262	

ORDER DATA

Part.-No.

Receiver plug-in card radio RWA 528738

Plug-in card for radio communication between the Aumüller RWA Control Unit EMB 7300 and up to 10 Radio-HSE Application:



TECHNICAL DATA

Rated voltage: 24 V DC Ambient temperature range: -5°C ... + 40°C

Relative humidity: (no condensate) 5% ... 90% Housing: without (assembled PCB)

Dimensions (WxH): 51 x 42 mm

Connection: SMA antenna connection

Feature/Equipment

- Production of a bidirectional communication between Radio-HSE and Aumüller RWA Control Unit EMB 7300.
- The licensed version of the "EMB compact configurator" required for commissioning.

528737 **Radio Antenna**

Radio Antenna for radio communication between the Aumüller RWA - Control Unit EMB 7300 and up to 10 Radio-HSE Application:

(Break-glass unit main control panel).



TECHNICAL DATA (Rated values)

Ambient temperature range: -5°C ... + 40°C

Relative humidity: (no condensate) 5% ... 90%

Dimensions (WxHxD) 34 x 265 x 82 mm SMA antenna connection Connection:

Feature/Equipment

- Production of a bidirectional communication between Radio-HSE and EMB 7300.
- The licensed version of the "EMB compact configurator" required for commissioning.

Radio-HSE - Break-glass unit main control panel (plastic)

Break-glass unit with indicators and buttons for the manual control of the emergency open and close functions

of a RWA group, for radio-connection in the Aumüller RWA - Control Unit EMB 7300.



TECHNICAL DATA (Rated values)

Operating voltage: 3.6 V DC Ambient temperature range: -5°C ... + 40°C

Surface mounting, plastic (ABS) Housing:

Dimensions (WxHxD) 130 x 130 x 32 mm

IP30

Protection rating:

Emergency OPEN, power, fault Display: Control elements: Buttons for emergency OPEN / CLOSE

Feature / Equipment

- Lockable, glazed door (including key)
- Radio button
- 3,6 V Lithium battery
- The licensed version of the "EMB compact configurator" required for commissioning.

VERSIONS				
Radio-HSE	plastic red	(similar to RAL 3000)	528731	
Radio-HSE	plastic yellow	(similar to RAL 1018)	528732	
Radio-HSE	plastic grey	(similar to RAL 7035)	528733	
Radio-HSE	plastic blue	(similar to RAL 5015)	528734	
Radio-HSE	plastic orange	(similar to RAL 2011)	528735	

OPTIONS		RADIO)
Spare battery 3,6 V Lithium	545050		



RADIO

RADIO

RADIO

ORDER DATA

Part.-No.

Radio Ventilation Control FLS 24V

623000

Application:

Room automation control unit for one drive 24 V DC or one RWA Control Unit, including a weather station with rain, temperature, sun and wind sensor

and a radio control with indoor temperature sensor.

TECHNICAL DATA

Radio control frequency: 868,2 MHz

Control Panel

Housing: plastic material

Total weight: approx. 170 gr. (including batteries)

Colour: matt white (similar to RAL 9016)

Mounting: surface mounted (aP)

Mounting: surface mounted (aP) Dimensions (W \times H \times D): approx. 103 \times 98 \times 28

Ambient temperature range: operation 0...+50°C, storage -10...+50°C

Ambient air humidity: max. 80% rF, avoid bedewing

Operating voltage: 2 x 1,5V (2 batteries, AA / mignon / LR6) or

2 x 1,2V (2 rechargeable batteries, AA / mignon / LR6)

Weather Station

Housing:plastic materialTotal weight:approx. 200 gr.Colour:white / translucentMounting:surface mounted (aP)

Protection rating: IP 44

Dimensions (W×H×D): approx. $96 \times 77 \times 118$

Ambient temperature range: operation -30...+60°C, storage -30...+70°C

Operating voltage: 12 - 40 V DC

Power consumption: approx. 2,2 W (at 24 V), standby approx. 2 W (at 24 V)

Switching capacity relay: (OPEN / CLOSE / COM) volt free contacts

Rain sensor heating: approx. 1,2 W
Temperature measurement range: -40...+80°C
Wind measurement range: 0...35 m / sec
Brightness measurement range: 0...150 kLux

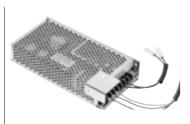
Feature/Equipment

- Radio connection between weather station and control panel.
- Control panel for basic setting, setting of the automatic function and for manual operation.
- Opening position adjustable for automatic mode (e.g. open only halfway).

NT-S-6,5 / 7300 5A – Power supply 230 V AC / 24 V DC, 6,5 A

683120

Application: Switch mode power supply for power supply and control of drives 24 V DC for daily ventilation, with one ventilation line. Parallel connection of a maximum of 8 power supplies.



TECHNICAL DATA

Operating voltage: 230 V AC (195 - 253 V AC, 50/60 Hz)

Output voltage: 24 V DC (2 Vpp)

Output current: 6,5 A

Duty cycle: ED30% (10 min)

Protection rating: IP 54

Housing / Dimensions (WxHxD): Surface mounting / 200 x 98 x 38 mm

Feature/Equipment

For installation in a control cabinet or comparable housing.

ORDER DATA

Part.-No.

Empty Housing 683133

Application: Empty Housing for Control Unit **EMB7300**. Version as lower part and door without cutout.



TECHNICAL DATA

Material: steel sheet
Colour: RAL 7035 (light grey)
Dimensions (WxHxD):: 225 x 285 x 122

Feature/Equipment

■ Including lock with 2 keys

Replacement board EMB7300 2,5A 1LG

683029

Application: Replacement board, for Control Units EMB7300-2,5A-0101 with one motor line.



TECHNICAL DATA

Operating voltage:
Output voltage:
Output current:
Vent groupe:

230 V AC (195 - 253 V AC, 50/60 Hz) 24 V DC (2 Vpp) **2,5 A**

Feature/Equipment

■ Board assembled and checked

Replacement	hoard	FMR7300	5Δ	/ 10A	11 G

683059

Application: Replacement board, for Control Units EMB7300-5A-0101 and EMB7300-10A-0101 with one motor line.



TECHNICAL DATA

Operating voltage: Output voltage: Output current: Vent groupe: 230 V AC (195 - 253 V AC, 50/60 Hz) 24 V DC (2 Vpp)

5 / 10 A

Feature/Equipment

■ Board assembled and checked

ORDER DATA

Part.-No.

Replacement board EMB7300 5A / 10A / 20A 2LG 683229

Application: Replacement board, for Control Units EMB7300-5A-0102, EMB7300-10A-0102 and EMB7300-20A-0102

with two motor lines.



TECHNICAL DATAOperating voltage:
Output voltage:

Output current: Vent groupes: 230 V AC (195 - 253 V AC, 50/60 Hz)

24 V DC (2 Vpp) **5 / 10 / 20 A**

Feature/Equipment

■ For Control Units 5A - 20A with two motor lines.

Key 1D9 260010

Application: Replacement key for the housing of a Control Unit.



TECHNICAL DATA

 Size:
 1D9

 Key:
 1 piece

Feature/Equipment

■ For lock 1D9 straight bolt EMB7300

Lock 1D9, including two keys 260008

Application: Lock - with security cylinder and straight bolt - for the housing of a Control Unit.

Including two keys and a spring.



TECHNICAL DATA

Security cylinder insert

Keys: 2 pieces

Feature/Equipment

■ Lock 1D9 straight bolt EMB7300