

# INDUSTRIAL ENCLOSURES AND THEIR APPLICATION

CONTEG offers a comprehensive range of industrial enclosures, that meet all of the requirements for application in even the most demanding industrial environments. We offer not only compact sheet steel enclosures, but also large, free-standing enclosures suitable for connecting in rows. You can choose from many sizes and four types of materials, it depends only on the area of use. All series of enclosures meet the high degree of coverage requirements. Industrial enclosures are manufactured in our production plant in Pelhrimov using state-of-the-art technological processes, thanks to which they have first-class functional properties, mechanical resistance and long service life.

	INDUSTRIAL ENCLOSURES					
	FSE sheet steel	FSM sheet steel	FSM-X stainless steel	WME sheet steel	WME-G glass-paneled doors	WME-X stainless steel
Application	Indoor installation	Indoor installation	Indoor installation Outdoor installation Food and chemical industry	Indoor installation	Indoor installation	Indoor installation Outdoor installation Food and chemical industry
Material	Sheet steel	Sheet steel	Stainless steel 1.4301 (AISI 304) Stainless steel 1.4404 (AISI 316L)	Sheet steel	Sheet steel, with glass-paneled doors	Stainless steel 1.4301 (AISI 304) Stainless steel 1.4404 (AISI 316L)
Version	Single-door Double-door	Single-door Double-door	Single-door Double-door	Single-door Double-door	Single-door Double-door	Single-door Double-door
IP rating	IP55	IP55	IP55	IP66 IP55	IP66 IP55	IP66 IP55
Mechanical durability	IK10	IK10	IK10	IK10	IK10 IK8	IK10
Color	RAL7035	RAL 7035	-	RAL 7035	RAL 7035	-
Surface finish	Epoxipolyester powder coating	Epoxipolyester powder coating	Fine ground surface	Epoxipolyester powder coating	Epoxipolyester powder coating	Fine ground surface



Many applications in the areas of measurement and control, automation, machine and plant control require that the temperature within the racks is controllable.

We calculate the required cooling/heating power to maintain stable thermal comfort for the installed elements inside the enclosures and we then recommend you the appropriate sort of cooling.

- > Wall and top mount air conditioning units—cooling capacity from 320 W to 4 000 W
- Thermoelectric unit—cooling and heat output up to 800 W
- > Filter fans—air flow 12 to 800 m³/h
- Heating units—permanent heating output 45 to 800 W

# FSM-X—FREE-STANDING STAINLESS STEEL COMPACT ENCLOSURES



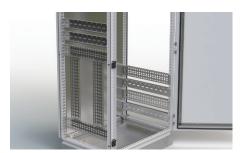
FSM-X-201004

FSM-X free-standing compact enclosures are made of stainless steel with side panels integrated in the frame. FSM-X enclosures are suitable for indoor and outdoor use and will withstand even the most demanding industrial environments, with an emphasis on a high level of cleanness and resistance to the surrounding environment. The compact welded construction of the enclosure is made of profiled side panels joined together by crossbar profiles. This manufacturing method can meet the highest requirements for rigidity and lends the enclosure 700 kg of load-bearing capacity. Thanks to the design of the bottom frame, FSM-X can be used even without an extra plinth. To create a variety of mounting surfaces and planes, we offer a wide range of system accessories designed for optimal use of the frame profile. We also supply components to control the environment inside the enclosure, such as heating units, filtered fans or active cooling units.

#### MAIN ADVANTAGES

- Welded compact construction with integrated side panels—stainless steel
- Load capacity 700 kg
- > Single-door enclosure designs
- > Can be installed without an additional supporting plinth
- > Designer lift-up handle—the standard for all enclosure types
- > Easy to close doors thanks to a special locking system
- Maximum use of interior space—possibility of placing the mounting plate between the rear posts
- > Side panels integrated in the frame
  - 17 sizes from 1 400 × 600 × 300 mm up to 2 000 × 1 000 × 400 mm
- Wide assortment of accessories
- Wide assortment of tailor-made customer solutions—cut-outs according to your requirements before and after final surface finishing accessories





Wide range of system rails creates additional mounting levels for individual installation.



Maximum use of interior space—possibility of placing the mounting plate between the rear uprights.

## FSM-X—FREE-STANDING STAINLESS STEEL COMPACT ENCLOSURES

# **STAINLESS STEEL**

### **DESCRIPTION**

#### Material

- Enclosure: stainless steel 1.4301 (AISI 304), on request stainless steel 1.4404 (AISI 316L)
- Mounting plate: zinc-plated sheet steel

#### Enclosure surface finish

• Fine ground surface

#### **Application**

• Indoors and outdoors

#### Degree of protection

 IP55 according to the EN 60529 norm (the degree of protection can be reduced after mounting some accessories)

#### Mechanical durability

• IK10 according to IEC 62262

#### Supply includes

- Welded construction with integrated side panels
- Full single-door with swing handle is equipped with a four-point locking system
- The door hinges are located on the right-hand side of the singledoor enclosure (option to switch the door mounting from right to left is available)
- Rear and top panel
- Gland plate
- Mounting plate with raster

		FSM-	X—FREE-STAND	ING STAINLESS S	STEEL COMPACT	ENCLOSURES, H	EIGHT 1400 AND	1600 mm	
	H (mm)		1400	1400	1600	1600	1600	1600	1600
Enclosure	W (mm)		600	600	600	800	800	1000	1000
	D (mm)		300	400	400	300	400	300	400
Mounting	H1 (mm)		1291	1291	1491	1491	1491	1491	1491
plate	W2 (mm)		497	497	497	697	697	897	897
Material	Rear and top pa	nel				1.25 /1.5			
thickness	Door		2	2	2	2	2	2	2
(mm)	Mounting plate		3	3	3	3	3	3	3
Door			1	1	1	1	1	1	1
Gland plate	, number of parts		2	2	2	2	2	2	2
Weight (kg)			75	81	82	104	109	120	132
Code	Code 1pc		FSM-X-140603	FSM-X-140604	FSM-X-160604	FSM-X-160803	FSM-X-160804	FSM-X-161003	FSM-X-161004
	ACCESSORIES								
Plinth	front and rear	1 set	ID-F-XPF06	ID-F-XPF06	ID-F-XPF06	ID-F-XPF08	ID-F-XPF08	ID-F-XPF10	ID-F-XPF10
100 mm	side parts	rset	ID-F-XPS03	ID-F-XPS04	ID-F-XPS04	ID-F-XPS03	ID-F-XPS04	ID-F-XPS03	ID-F-XPS04

To order the enclosure without the mounting plate, use order number FSM-X-xxxxxx-01.

	FSM-X—FREE-STANDING STAINLESS STEEL COMPACT ENCLOSURES, HEIGHT 1800 mm						
	H (mm)		1800	1800	1800	1800	
Enclosure	W (mm)		600	800	800	1000	
	D (mm)		400	300	400	400	
Mounting	H1(mm)		1691	1691	1691	1691	
plate	W2 (mm)		497	697	697	897	
Rear and top panel		panel		1.25	/1.5		
thickness	Door		2	2	2	2	
(mm)	Mounting plate		3	3	3	3	
Door			1	1	1	1	
Gland plate,	number of parts	S	2	2	2	2	
Weight (kg)			99	104	109	146	
Code 1pc		1pc	FSM-X-180604	FSM-X-180803	FSM-X-180804	FSM-X-181004	
	ACCESSORIES						
Plinth 100 mm	front and rear	1set	ID-F-XPF06	ID-F-XPF08	ID-F-XPF08	ID-F-XPF10	
100 mm	side parts		ID-F-XPS04	ID-F-XPS03	ID-F-XPS04	ID-F-XPS04	

	FSM-X—FREE-STANDING STAINLESS STEEL COMPACT ENCLOSURES, HEIGHT 2 000 mm							
	H (mm)		2000	2000	2000	2000	2000	2 000
Enclosure	W (mm)		600	600	800	800	800	1000
	D (mm)		300	400	300	400	500	400
Mounting	H1(mm)		1891	1891	1891	1891	1891	1891
plate	W2 (mm)		497	497	697	697	697	897
Material	Rear and top pan	el	1.2/1.5					
thickness (mm)	Door		2	2	2	2	2	2
(mm)	Mounting plate		3	3	3	3	3	3
Door			1	1	1	1	1	1
Gland plate,	, number of parts		2	2	2	2	2	2
Weight (kg)			102	107	124	132	138	159
Code 1pc		FSM-X-200603	FSM-X-200604	FSM-X-200803	FSM-X-200804	FSM-X-200805	FSM-X-201004	
	ACCESSORIES							
Plinth	front and rear	1set	ID-F-XPF06	ID-F-XPF06	ID-F-XPF08	ID-F-XPF08	ID-F-XPF08	ID-F-XPF10
100 mm	side parts	1 Set	ID-F-XPS03	ID-F-XPS04	ID-F-XPS03	ID-F-XPS04	ID-F-XPS05	ID-F-XPS04

To order the enclosure without the mounting plate, use order number FSM-X-xxxxxx-01.

# Recommended Accessories







Filter fans



Horizontal and vertical extrusions

# FSM-X—FREE-STANDING STAINLESS STEEL COMPACT ENCLOSURES

# **ACCESSORIES**

### **PLINTHS**



- Material: 2mm stainless steel
- Surface finish: fine ground surface
- It is necessary to order front and side set together
- Possibility of installing two plinths of 100 mm height apart
- Supply includes: mounting accessories

Code for 100 mm high plinth	For enclosure width (mm)	Package
Plinth—front and rear set		
ID-F-XPF06	600	1 set
ID-F-XPF08	800	1 set
ID-F-XPF10	1000	1 set
Plinth—sides set		
ID-F-XPS03	300	1 set
ID-F-XPS04	400	1 set
ID-F-XPS05	500	1 set

#### **SEALING SET IP55**



- Application: plugs and sealing tape for IP55 protection
- Supply includes: whole set for an FSM enclosure

Code	Package
ID-F-KIT55	1 pc

#### **SPARE MOUNTING PLATE**



- Material: 3mm zinc-plated sheet steel
- Supply includes: mounting plate with marked raster, mounting accessories and brackets

Code	For enclosure height × width (mm)
ID-F-SP1806	1800 × 600
ID-F-SP1808	1800 × 800
ID-F-SP1810	1800×1000
ID-F-SP2006	2000 × 600
ID-F-SP2008	2000 × 800
ID-F-SP2010	2 000 × 1 000

### LOWER BRACKETS FOR MOUNTING PLATES



- Material: 5 mm zinc-plated sheet steel
- Application: to allow the mounting plate to be moved out of the rear position of the frame
- Mounting: mount on the lower side of the frame profile
- Supply includes: mounting accessories

Code	Package
ID-F-SBR	1 pc

### SIDE BRACKETS FOR MOUNTING PLATES



- Material: 2mm zinc-plated sheet
- Application: for additional mounting plate fixation and vibration reduction
- Mounting: mount on horizontal ID-F-Hxx or ID-F-NHxx rails or directly on the upright
- Supply includes: mounting accessories

Code	Package
ID-F-LBP	1 set

### HORIZONTAL/VERTICAL EXTRUSIONS



ID-F-H (for mounting on the sides of the frame profiles)



ID-F-NH (for mounting between the frame profiles)

- Material: 2mm zinc-plated sheet steel
- Rail width: 90 mm (ID-F-H), 41.2 mm (ID-F-NH)
- Application: to create more mounting planes (horizontal and vertical)
- Mounting: ID-F-Hx on the sides of the frame profiles
- Mounting: ID-F-NHx between the frame profiles
- Supply includes: mounting accessories

Code	For enclosure height/ width/depth (mm)	Load capacity in horizontal position	Load capacity in vertical position	Package *
Mounting on	the sides of the fra	me profiles		
ID-F-H4	400	140 kg	240 kg	1 set
ID-F-H5	500	100 kg	240 kg	1 set
ID-F-H6	600	70 kg	240 kg	1 set
ID-F-H8	800	50 kg	180 kg	1 set
ID-F-H10	1000	50 kg	140 kg	1 set
ID-F-H12	1200	50 kg	120 kg	1 set
ID-F-H18	1800	36 kg	80 kg	1 set
ID-F-H20	2000	32 kg	70 kg	1 set
Mounting bet	ween the frame pr	ofiles		
ID-F-NH4	400	95 kg	95 kg	1 set
ID-F-NH5	500	85 kg	85 kg	1 set
ID-F-NH6	600	70 kg	70 kg	1 set
ID-F-NH8	800	56 kg	56 kg	1 set
ID-F-NH10	1000	45 kg	45 kg	1 set
ID-F-NH12	1200	35 kg	35 kg	1 set
ID-F-NH18	1800	21 kg	21 kg	1 set
ID-F-NH20	2000	20 kg	20 kg	1 set

<sup>\* 1</sup> set—2 pcs.

#### **HORIZONTAL EXTRUSIONS**



• Material: 3mm zinc-plated sheet steel

• Rail width: 87.5 mm

• Application: for installing high weight components

• Mounting: mount on frame profiles

• Supply includes: mounting accessories

Code	For enclosure width/depth (mm)	Load capacity in horizontal position	Package *
ID-F-HH4	400	260 kg	1 set
ID-F-HH5	500	210 kg	1 set
ID-F-HH6	600	175 kg	1 set
ID-F-HH8	800	130 kg	1 set
ID-F-HH10	1000	100 kg	1 set

<sup>\*1</sup>set-2 pcs.

#### **DOOR-MOUNTING RAILS**



• Material: 2mm zinc-plated sheet steel

• Rail width: 20 mm

• Application: for creating more mounting planes on the inner sides of the doors

• Mounting: into the door frame

• Supply includes: mounting accessories

Code	For door/wing dimensions (mm)	Package *
ID-F-VD6	600	1set
ID-F-VD8	800	1set
ID-F-VD10	1000	1set

<sup>\* 1</sup> set—2 pcs.

## **PROFILE FOR CABLE FIXING**

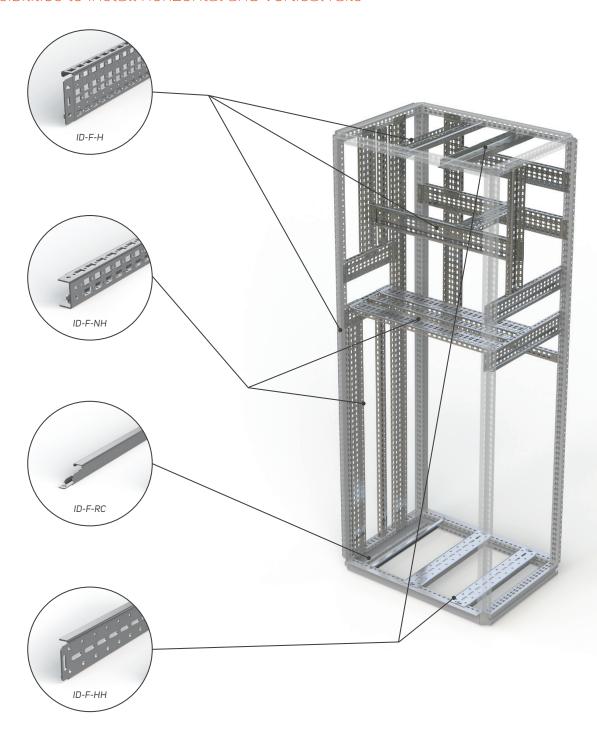


- Material: 2mm zinc-plated sheet steel
- Application: for cable glands
- Mounting: mount on the lower side profile of the frame or on the mounting plate (ID-F-RCUxx)
- Mounting: mount between the bottom side frame profiles (ID-F-RCxx)
- Supply includes: mounting accessories

Code	Code	For enclosure width/depth (mm)	Package *
ID-F-RC4	ID-F-RCU4	400	1 set
ID-F-RC6	ID-F-RCU6	600	1 set
ID-F-RC8	ID-F-RCU8	800	1 set
ID-F-RC10	ID-F-RCU10	1000	1 set

<sup>\*1</sup>set-2 pcs.

# Possibilities to install horizontal and vertical rails



# **EYE BOLTS**



- Eye bolts for crane transport
  Application: for assembling with FSM, holes with internal threads under roof
- Material: zinc-plated carbon steelDIN580
- M12
- Package includes: 4 pcs

Code	Package
ID-F-EB	1 set

## **19" RAILS**



- Material: 2mm zinc-plated sheet steel
- Application: to make 19" planes in the FSM enclosures
- Mounting: onto the ID-F-UBxx + ID-F-Hxx brackets
- Supply includes: 19" vertical extrusions and mounting accessories

Code *	For enclosure height × width (mm)	Package
ID-F-V186	1800×600 (36U)	1set
ID-F-V206	2000 × 600 (42U)	1set
ID-F-V188	1800×800 (36U)	1set
ID-F-V208	2000 × 800 (42U)	1set

<sup>\*</sup> It's necessary to order 19" brackets ID-F-UBxx.

## 19" BRACKETS



ID-F-UB08

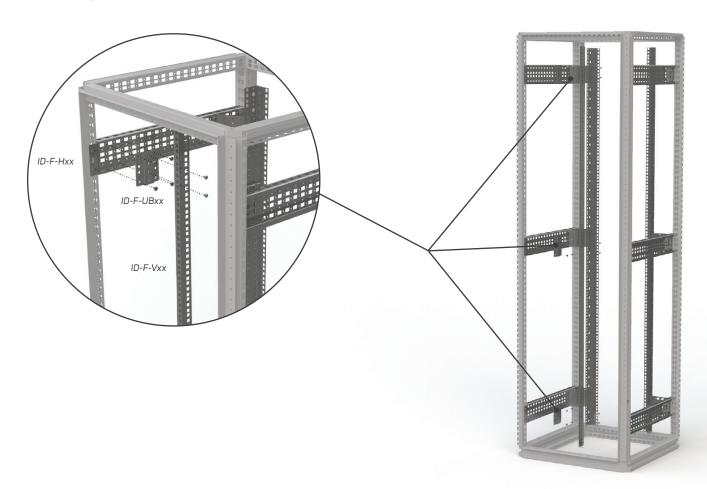
ID-F-UB06

- Material: 1.5mm (ID-F-UB06); 2mm (ID-F-UB08) zinc-plated sheet steel
- $\bullet$  Application: to make 19" planes in the FSM enclosures of width 600 and 800 mm
- Mounting: onto system extrusions ID-F-Hxx
- Supply includes: brackets for 19" vertical extrusions and mounting accessories

Code	For enclosure width (mm)	Package *
ID-F-UB06	600	1 set
ID-F-UB08	800	1 set

<sup>\*1</sup>set-6 pcs.

# Mounting 19" extrusion



### 19" SWING FRAME



- Material: 2mm sheet steel
- Swing frame load-bearing capacity: 150 kg
- Use: to create a swinging 19" plane and an access point to the back of the rack enclosure with width of 800 mm
- Installation: onto the enclosure structure
- Supply includes: 19" swing frame including a lock and horizontal crossbars for mounting

Code	For enclosure height × width (mm)	Package
ID-F-1808-SF15	1800×800	1 set
ID-F-2008-SF15	2000×800	1 set

#### **DOOR STOP**



- Application: for FSM enclosures
- Supply includes: door stop and mounting accessories

Code	Package
ID-F-DS	1 рс

#### **DOOR SWITCH**



- Brackets material: 2mm zinc-plated sheet steel
- Door switch: IP65, plastic, 1NO + 1 NC, PG13.5, -25 °C to +70 °C
- Supply includes: door switch and mounting accessories

Code	Package
ID-F-DC	1 pc

### **UTILITY LECTERN**



- Material: 1.5mm sheet steel
- Color: RAL 7035
- Mounting: mount onto the door frame
- Dimensions: depth 356 mm, width—suitable for the specific enclosure dimensions
- Supply includes: mounting accessories

Code	For enclosure width (mm)	Package
ID-F-CDD6	600	1set
ID-F-CDD8	800	1set
ID-F-CDD10	1000	1set

### **PARTIAL MOUNTING PLATE**



- Material: 3mm zinc-plated sheet steel
- Application: to create additional front and side mounting planes, the plates are versatile and can be mounted horizontally to the appropriate enclosure width or vertically to the appropriate enclosure depth
- Mounting: mount horizontally or vertically on the frame profiles or system rails
- Supply includes: mounting accessories

For enclosure width (mm)	For enclosure depth (mm)	Mounting plane height (mm)
600	-	400
-	400	600
600	-	500
-	500	600
800	-	400
-	400	800
800	-	600
-	600	800
1000	-	400
-	400	1000
-	400	1200
	width (mm) 600 - 600 - 800 - 800 - 800	width (mm)         depth (mm)           600         -           -         400           600         -           -         500           800         -           -         400           800         -           -         600           1000         -           -         400

## LOCKS/LOCK INSERTS



- Application: spare inserts instead of the standard 5 mm double-bar
- Supply includes: mounting accessories

Code	Туре	Package
ID-F-INLK1	Lock for inTEG FSE, key 5333	1set
ID-F-INLK3	Lock for inTEG FSE, unique key	1set
ID-F-INS7	Lock insert 7 mm SQUARE, black zamak	1set
ID-F-INS8	Lock insert 8 mm SQUARE, black zamak	1set
ID-F-INT7	Lock insert 7 mm TRIANGULAR, black zamak	1set
ID-F-INT8	Lock insert 8 mm TRIANGULAR, black zamak	1set
ID-F-INLKE1	Lockable VW 1 cap	1set
ID-F-INSS	Complete handle	1set
ID-F-INSSA	Door plate double-bar 5 mm	1set

#### **EARTHING**



- Material: tinned copper
- Supply includes: various lengths and cross-sections of flat conductors with pressed contact holes with an M8 opening

Code	Туре	Package
ID-F-EK1	Flat earthing conductor for M8, length 200 mm, cross-section 16 mm <sup>2</sup>	10 pcs
ID-F-EK2	Flat earthing conductor for M8, length 200 mm, cross-section 25 mm <sup>2</sup>	10 pcs
ID-F-EK3	Flat earthing conductor for M8, length 300 mm, cross-section 16 mm <sup>2</sup>	10 pcs
ID-F-EK4	Flat earthing conductor for M8, length 300 mm, cross-section 25 mm <sup>2</sup>	10 pcs

#### **FASTENERS**











 Supply includes: M6x16 ISO 7380 Zn (ID-W-SMS6x16) cage nuts, screws, hinge, pull-out brackets and fasteners for FSM (ID-F-CK)

Code	Description	Package
ID-W-CNM6	Cage nut M6	10 pcs
ID-W-SMS6x16	Screw M6×16, ISO 7380, Zn	10 pcs
ID-W-CNM8	Cage nut M8	10 pcs
ID-W-SMS8x16	Screw M8×16, ISO 7380, Zn	10 pcs
ID-F-CK	Hinge, pull-out brackets, replacement fasteners for FSM	1set

#### **LED LIGHT**



- Material: PC, transparent and ABS
- Application: to light up the interior of the enclosure, option of connecting several light fixtures
- Mounting: mount onto the frame profiles or by magnets
- Dimensions: 357.4 × 32 × 31.16 mm
- Degree of protection: IP20
- Supply includes: complete lighting unit with rocker switch, inter-connection cables

Code	Туре	Package
ID-F-L	Lighting unit LED 4 W, 24-265 V (DC/AC), 0/50/60 Hz	1 pc

### **POCKETS FOR DOCUMENTS**



- Material: ABS
- Color: RAL 7035
- Dimensions:  $234 \times 241 \times 31 \text{ mm} (H \times W \times D)$
- Mounting: with a self-adhesive tape
- Supply includes: pocket for documents and self-adhesive tape



- Material: 1mm sheet steel
- Color: RAL 7035
- Mounting: onto the door frame
- Supply includes: pocket for documents and mounting accessories

Code	Package
ID-PO-A4	1 pc

Code	For door/wing dimensions (mm)	Package
ID-F-MP06	600	1 set
ID-F-MP08	800	1 set
ID-F-MP10	1000	1 set

### CLIMATE CONTROL SOLUTIONS FOR FSM-X

# **FILTER FANS**





### MAIN ADVANTAGES

- Quick assembly without screws and tools into a square cut-out, easy to mount with highly elastic clips
- > Easy filter insert replacement from the outside without tools
- > Possible to change airflow direction
- Airflow up to 800 m³/h
- > Can be mounted in a enclosure with a sheet thickness of 1-2.5 mm
- > IP 54 standard degree of protection
- > Side and top ventilator placement
- Operating temperature range -10 °C up to +70 °C
- > Polyurethane foam sealing around the whole perimeter
- > Resistance against UV radiation
- > Holes for installation in the CONTEG Modification Center

# **DESCRIPTION**

- Plastic parts made of ABS/PC mix, all parts are self-extinguishing according to UL 94V-0
- Standard color RAL 7035 (different color on request)
- Filter inserts made of synthetic fibres of class G3 according to EN

779 and class G4 according to EN 779 and UL 900 class 2 selfextinguishing in class F1 according to DIN 53 438

- Filter inserts are cleaned by washing, compressed air and banging
- Encapsulated fan ball bearings
- IP54 standard degree of protection EN 60529 and NEMA 12 according to UL 50
- IP55 settable (according to EN 60529)
- IP56 when using protective cover against splashing water
- EMC version available on request

#### Fans

Code	Airflow	Dimensions H × W × D	Voltage **	Frequency	Outlet filter grid	Cut-out dimensions	Degree of protection
ID-EF-01-4	12/15 m³/h	106.5 × 106.5 × 59.9 mm	230 VAC	50/60 Hz	ID-EF-01	92×92 mm	IP54
ID-EF-01-1	15 m³/h	106.5 × 106.5 × 59.9 mm	24 VDC	-	ID-EF-01	92 × 92 mm	IP54
ID-EF-04-4	45/50 m <sup>3</sup> /h	150 × 150 × 65.5 mm	230 VAC	50/60 Hz	ID-EF-03	125 × 125 mm	IP54
ID-EF-04-1	47 m³/h	150 × 150 × 65.5 mm	24 VDC	-	ID-EF-03	125 × 125 mm	IP54
ID-EF-10-4	100/110 m <sup>3</sup> /h	203.9 × 203.9 × 87.5 mm	230 VAC	50/60 Hz	ID-EF-05	177 × 177 mm	IP54
ID-EF-10-1	100 m³/h	203.9 × 203.9 × 87.5 mm	24 VDC	-	ID-EF-05	177 × 177 mm	IP54
ID-EF-23-4	230/270 m <sup>3</sup> /h	250 × 250 × 115.3 mm	230 VAC	50/60 Hz	ID-EF-07	223 × 223 mm	IP54
ID-EF-22-1	225 m³/h	250 × 250 × 115.3 mm	24 VDC	-	ID-EF-07	223 × 223 mm	IP54
ID-EF-52-4	520/580 m <sup>3</sup> /h	325 × 325 × 150.7 mm	230 VAC	50/60 Hz	ID-EF-09	291×291 mm	IP54
ID-EF-71-4	710/800 m <sup>3</sup> /h	325 × 325 × 149 mm	230 VAC	50/60 Hz	ID-EF-09	291×291 mm	IP54
ID-EFT-42-4*	420/490 m <sup>3</sup> /h	324 × 324 × 94 mm	230 VAC	50/60 Hz	ID-EF-09	fan 175 × 175 mm/grid 291 × 291 mm	IP54
ID-EO-TC	Thermostat for cooling	55 × 33 × 43 mm	250 VAC/10 A	-	-	-	IP20

<sup>\*</sup> Top version.

<sup>\*\*</sup> Other input voltage options available upon request.



## CLIMATE CONTROL SOLUTIONS FOR FSM-X

# **COOLING UNITS**



### MAIN ADVANTAGES

- Cooling capacity from 320 W up to 4 000 W
- > Easy maintenance—units don't require filter inserts
- > Higher cooling capacity and reliability thanks to highly efficient condenser made of aluminum
- > Units are environmentally friendly—cooling medium R134a
- Robust stainless steel cases
- > Simple regulation and monitoring
- Easy and fast mounting (side and top version)
- High-quality components ensure long service life and reliability (such as the Mitsubishi Electric rotary piston compressor)
- Transport units in any position
- > World-recognized certifications (UL, CUL, CE)
- Holes for installation in the CONTEG Modification Center

### **DESCRIPTION**

#### Material

• Stainless steel

#### Color

• RAL 7035

#### Cooling medium

• R134a

#### Degree of protection

- Outer circle IP54
- Inner circle IP24

#### Mounting type

• External

• Fully recessed

#### Certification

• CE. cURus

#### Supply includes:

• Unit prepared for connection and immediate use

# Cooling units SLIM (wall-mounted or fully recessed mounting)

Code	Cooling capacity	Dimensions H × W × D	Voltage *	Frequency	Version	Cut-out dimensions	Degree of protection
AC-WM3-03-4200	320 W	520 × 270 × 110 mm	230 VAC	50/60 Hz	Stainless steel	501 × 251 mm	IP54/IP24
AC-WM3-04-4200	400 W	520 × 320 × 110 mm	230 VAC	50/60 Hz	Stainless steel	504 × 308 mm	IP54/IP24
AC-WM3-04-420H	400 W	340 × 520 × 110 mm	230 VAC	50/60 Hz	Stainless steel	321 × 501 mm	IP54/IP24
AC-WM3-05-4200	500 W	600 × 320 × 110 mm	230 VAC	50/60 Hz	Stainless steel	581 × 301 mm	IP54/IP24
AC-WM3-08-4200	820 W	980 × 395 × 145 mm	230 VAC	50/60 Hz	Stainless steel	954 × 376 mm	IP54/IP24
AC-WM3-08-6200	820 W	980 × 395 × 145 mm	400 VAC	50/60 Hz	Stainless steel	954 × 376 mm	IP54/IP24
AC-WM3-11-4200	1100 W	1250 × 395 × 145 mm	230 VAC	50/60 Hz	Stainless steel	1214 × 376 mm	IP54/IP24
AC-WM3-11-6200	1100 W	1250 × 395 × 145 mm	400 VAC	50/60 Hz	Stainless steel	1214 × 376 mm	IP54/IP24
AC-WM3-15-4200	1500 W	1550 × 395 × 145 mm	230 VAC	50/60 Hz	Stainless steel	1531 × 376 mm	IP54/IP24
AC-WM3-15-6200	1500 W	1550 × 395 × 145 mm	400 VAC	50/60 Hz	Stainless steel	1531×376 mm	IP54/IP24

<sup>\*</sup> Other input voltage options available upon request.

# Cooling units COMPACT (wall-mounted)

Code	Cooling capacity	Dimensions H × W × D	Voltage *	Frequency	Material	Cut-out dimensions	Degree of protection
AC-WM4-03-4200	320/360 W	500 × 280 × 200 mm	230 VAC	50/60 Hz	Stainless steel	480 × 240 mm	IP54/IP24
AC-WM4-05-4200	550/620 W	650 × 315 × 260 mm	230 VAC	50/60 Hz	Stainless steel	635 × 275 mm	IP54/IP24
AC-WM4-05-6200	550/620 W	650 × 315 × 260 mm	400 VAC	50/60 Hz	Stainless steel	635 × 275 mm	IP54/IP24
AC-WM4-08-4200	750/780 W	650 × 315 × 260 mm	230 VAC	50/60 Hz	Stainless steel	635 × 275 mm	IP54/IP24
AC-WM4-08-6200	750 W	650 × 315 × 260 mm	400 VAC	50/60 Hz	Stainless steel	635 × 275 mm	IP54/IP24
AC-WM4-10-4200	1000/1080 W	650 × 315 × 260 mm	230 VAC	50/60 Hz	Stainless steel	635 × 275 mm	IP54/IP24
AC-WM4-10-6200	1000 W	650 × 315 × 260 mm	400 VAC	50/60 Hz	Stainless steel	635 × 275 mm	IP54/IP24
AC-WM4-15-4200	1500/1630 W	980 × 395 × 260 mm	230 VAC	50/60 Hz	Stainless steel	920 × 335 mm	IP54/IP24
AC-WM4-15-6200	1500 W	980 × 395 × 260 mm	400 VAC	50/60 Hz	Stainless steel	920 × 335 mm	IP54/IP24
AC-WM4-20-4200	2000 W	980 × 395 × 260 mm	230 VAC	50/60 Hz	Stainless steel	920 × 335 mm	IP54/IP24
AC-WM4-20-6200	2 000 W	980 × 395 × 260 mm	400 VAC	50/60 Hz	Stainless steel	920 × 335 mm	IP54/IP24
AC-WM4-25-4200	2 500 W	1230 × 500 × 340 mm	230 VAC	50/60 Hz	Stainless steel	1130 × 430 mm	IP54/IP24
AC-WM4-25-6200	2500 W	1230 × 500 × 340 mm	400 VAC	50/60 Hz	Stainless steel	1130 × 430 mm	IP54/IP24
AC-WM4-30-4200	3 000 W	1230 × 500 × 340 mm	230 VAC	50/60 Hz	Stainless steel	1130 × 430 mm	IP54/IP24
AC-WM4-30-6200	3 000 W	1230 × 500 × 340 mm	400 VAC	50/60 Hz	Stainless steel	1130 × 430 mm	IP54/IP24
AC-WM4-40-4200	4 000 W	1230 × 500 × 340 mm	230 VAC	50/60 Hz	Stainless steel	1130 × 430 mm	IP54/IP24
AC-WM4-40-6200	4 000 W	1230 × 500 × 340 mm	400 VAC	50/60 Hz	Stainless steel	1130 × 430 mm	IP54/IP24

<sup>\*</sup> Other input voltage options available upon request.

# Cooling units TOP (top mounting)

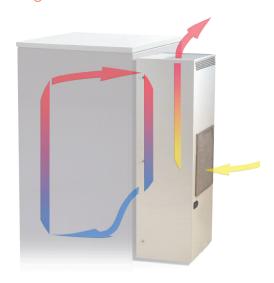
Code	Cooling capacity	Dimensions H × W × D	Voltage *	Frequency	Material	Cut-out dimensions	Degree of protection
AC-TM3-04-4200	450/460 W	230 × 430 × 330 mm	230 VAC	50/60 Hz	Stainless steel	142 × 98 mm/142 × 147.5 mm	IP54/IP24
AC-TM3-11-4200	1100/1150 W	400 × 600 × 400 mm	230 VAC	50/60 Hz	Stainless steel	108 × 530 mm (×2)	IP54/IP24
AC-TM3-11-6200	1100/1150 W	400 × 600 × 400 mm	400 VAC	50/60 Hz	Stainless steel	108 × 530 mm (×2)	IP54/IP24
AC-TM3-15-4200	1500 W	410 × 600 × 400 mm	230 VAC	50/60 Hz	Stainless steel	363 × 236.4 mm (×2)	IP54/IP24
AC-TM3-15-6200	1500 W	410 × 600 × 400 mm	400 VAC	50/60 Hz	Stainless steel	363 × 236.4 mm (×2)	IP54/IP24
AC-TM3-20-6200	2000 W	410 × 600 × 400 mm	400 VAC	50/60 Hz	Stainless steel	363 × 236.4 mm (×2)	IP54/IP24

<sup>\*</sup> Other input voltage options available upon request.

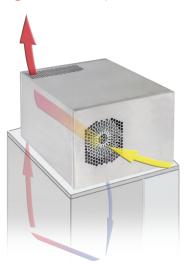
# CLIMATE CONTROL SOLUTIONS FOR FSM-X

# **AIR FLOW**

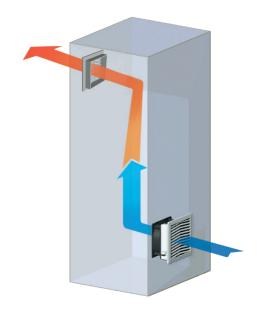
Cooling units—wall-mounted



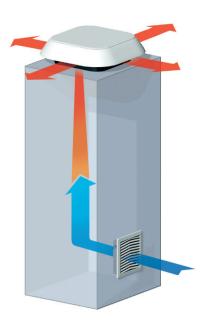
Cooling units—top



Fans—wall-mounted



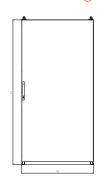
Fans—top

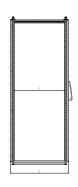


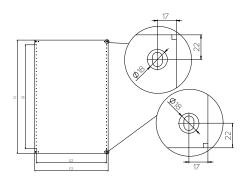
# FSM-X—FREE-STANDING STAINLESS STEEL COMPACT ENCLOSURES

# **TECHNICAL DRAWINGS**

# FSM-X—free-standing compact enclosures—stainless steel







Code	Height (mm)	Width (mm)	Depth	(mm)		Mounting	plate (mm)		Mat	# of		
	Н*	W*	D *	Т	F1	F2	G1	G2	Enclosure	Door	Mounting plate	doors
FSM-X-140603	1400	600	300	210	1291.2	497	1150	450	1.5	2	3	1
FSM-X-140604	1400	600	400	310	1291.2	497	1150	450	1.5	2	3	1
FSM-X-160604	1600	600	400	310	1491.2	497	1350	450	1.5	2	3	1
FSM-X-160803	1600	800	300	210	1491.2	697	1350	650	1.5	2	3	1
FSM-X-160804	1600	800	400	310	1491.2	697	1350	650	1.5	2	3	1
FSM-X-161003	1600	1000	300	210	1491.2	897	1350	850	1.5	2	3	1
FSM-X-161004	1600	1000	400	310	1491.2	897	1350	850	1.5	2	3	1
FSM-X-180604	1800	600	400	310	1691.2	497	1550	450	1.5	2	3	1
FSM-X-180803	1800	800	300	210	1691.2	697	1550	650	1.5	2	3	1
FSM-X-180804	1800	800	400	310	1691.2	697	1550	650	1.5	2	3	1
FSM-X-181004	1800	1000	400	310	1691.2	897	1550	850	1.5	2	3	1
FSM-X-200603	2000	600	300	210	1891.2	497	1750	450	1.5	2	3	1
FSM-X-200604	2000	600	400	310	1891.2	497	1750	450	1.5	2	3	1
FSM-X-200803	2000	800	300	210	1891.2	697	1750	650	1.5	2	3	1
FSM-X-200804	2000	800	400	310	1891.2	697	1750	650	1.5	2	3	1
FSM-X-200805	2000	800	500	410	1891.2	697	1750	650	1.5	2	3	1
FSM-X-201004	2000	1000	400	310	1891.2	897	1750	850	1.5	2	3	1

<sup>\*</sup> Internal dimensions: H—90 mm, W—90 mm, D—90 mm.

