

FLUX CENTRIFUGAL IMMERSION PUMPS – QUALITY THAT SETS STANDARDS

Manufactured at our main plant, these ranges of immersion pumps are the result of extensive product and process evaluation by our research and development department.

They are a true FLUX product, from conception through to manufacture, assembly and testing. Their design philosophy, and the materials selected for their construction make them ideal for applications in the chemical industry, surface treatment, electroplating, printed circuit manufacturing, water treatment and wastewater treatment.

FLUX centrifugal immersion pumps can be used whenever liquids have to be transferred or circulated. They are suitable for use with a wide variety of acids and alkalis as well as other chemicals, typically coolants, lubricants and non-flammable solvents.

With delivery rates of up to 74 m³/h and delivery heads of maximum 35 m water column, FLUX centrifugal immersion pumps combine maximum efficiency with a robust and reliable construction, resulting in a pump that provides the ultimate in process security. These are features that you can rely on, each hour, 24 hours a day.

The mechanical seal types F 620 and F 640 are designed for typical liquid transfer operations, with either stationary or portable variants. These units compliment the well-proven barrel pumps range and have a higher output and kW-rating.

Top of the range, are the sealless units, these pumps complete the range of high output, high reliability immersion pumps. Designed for continuous use with a wide range of aggressive liquids, from acids to alkalis, the range includes the type F 706 – with only a sleeve bearing in contact with the liquid – or the types F 716 and F 726 – with a suspended free-flying shaft and no bearings or seals in contact with the liquid.

Three-phase drive motors are available as matched power units in kW-ratings from 0,37 to 5,5 kW, protected to IP 55 as well as explosion-proof to EEx e II T3 for models F 620, F 640, F 706 and F 726.

With immersion lengths from 300 to 4000 mm almost every application requirement can be met. The use of high-class materials such as Hastelloy C and polyvinylidenfluoride, together with polypropylene and stainless steel, are combined with design experience perfected over decades of pump manufacturing. This guarantees the long service life of FLUX centrifugal immersion pumps.

Detailed information and performance charts are shown on the following pages.

To receive a quotation compiled to your application, please could you to fill in the questionnaire on page 22.2 and return it to us.



SAFE, POWERFUL, RELIABLE – THE NEW FLUX RANGE

With 4 different design formats within the vertical centrifugal immersion pump range FLUX offer a cost effective, reliable solution for many liquid transfer and circulating operations. With these pumps FLUX meet the requirements of the market with their forward-looking designs and the manufacture of high quality products.

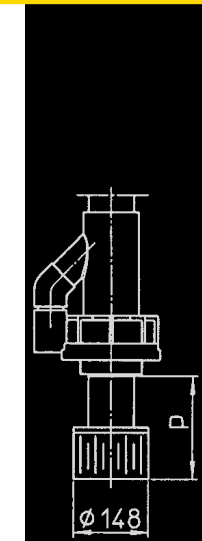
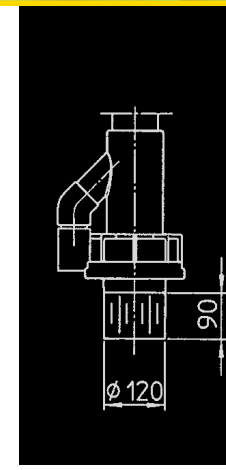
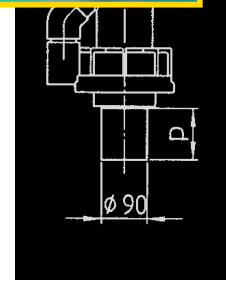
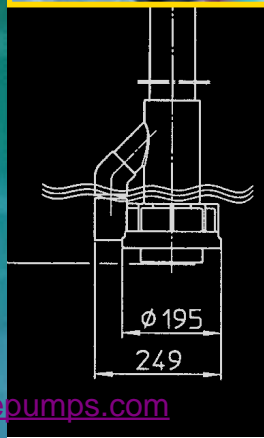


Type F 706:
4 different sizes, sealless design with sleeve bearing, immersion length up to 20m

Type F 726:
very robust construction with shaft bearing located in a pedestal, version with support bars for continuous use, suitable for dry operation

Type F 620 and F 640:
with mechanical seal in vertical and horizontal version

Type F 716:
compact design requires little space for installation, version with support tube or support bars for continuous use, suitable for dry operation



CENTRIFUGAL PUMP F 620 S TR IN STAINLESS STEEL, WITHOUT DRIVE MOTOR

Type / Size	F 620 5-30 TR
Delivery rate Q max.	23 m ³ /h
Delivery head H max.	12 m water column
Viscosity max.	2500 mPas (cP)
Temperature max.	100 °C
Seal type	mechanical seal in ceramic oxide, o-rings in FPM
Material	shaft in stainless steel 1.4571/316 Ti, seals in FPM
Impeller	open conical impeller in polypropylene (version in stainless steel on request)
Suction side	thread G 2 A (BSP 2" male)
Discharge side	thread G 1 1/2 A (BSP 1 1/2" male)
Part No.	620 25 502

Accessories:	Part No.
Base plate in aluminium alloy	001 15 002
Hose connection in stainless steel, complete with nut G 1 1/2 (BSP 1 1/2" female)	
for hose inside diameter DN 25	959 04 002
for hose inside diameter DN 32	959 04 003
for hose inside diameter DN 38	959 04 004

CENTRIFUGAL PUMP F 640 PP TR IN POLYPROPYLENE, WITHOUT DRIVE MOTOR

Type / Size	F 640 PP-30 TR	
Delivery rate Q max.	29 m ³ /h	
Delivery head H max.	10 m water column	
Viscosity max.	2500 mPas (cP)	
Temperature max.	50 °C	
Seal type	mechanical seal in ceramic oxide /SiC, o-rings in FPM	
Material	shaft in Hastelloy C, seals in FPM	
Impeller	open conical impeller in PP	
Suction side	thread G 2 A (BSP 2" male)	flange DN 65, PN 10
Discharge side	thread G 2 1/4 A (BSP 2 1/4" male)	flange DN 50, PN 10
Part No.	640 41 601	640 41 600

CENTRIFUGAL PUMP F 640 PP TR IN POLYPROPYLENE, WITHOUT DRIVE MOTOR

Type / Size	F 640 PP-230 TR
Delivery rate Q max.	44 m ³ /h
Delivery head H max.	33 m water column
Viscosity max.	150 mPas (cP)
Temperature max.	60 °C
Seal material	mechanical seal in ceramic oxide/SiC, o-rings in FPM
Material	shaft in Hastelloy C, seals in FPM
Impeller	Ø 100 – 160 mm in PP
Suction side	flange DN 65, PN 10; outside Ø 185 mm, p.c.Ø 145 mm, 4 bores Ø 18 mm each
Discharge side	flange DN 50, PN 10; outside Ø 165 mm, p.c.Ø 125 mm, 4 bores Ø 18 mm each
Part No.	640 41 300

Accessories:	Part No.
Base plate in aluminium alloy for F 640 PP-30 TR	001 15 001
Base plate in polypropylene for F 640 PP-30 TR and F 640 PP-230 TR	001 15 023
Hose connection in polypropylene, complete with nut G 2 1/4 (BSP 2 1/4" female)	
for hose inside diameter DN 32	959 04 098
for hose inside diameter DN 38	959 04 099
for hose inside diameter DN 50	959 04 100

Drive motors see page 9

SCOPE OF SUPPLY

A complete centrifugal pump in horizontal version consists of drive motor, pump and base plate. Weight per pump including base plate: 9 – 50 kg depending on pump size and motor kW.

CENTRIFUGAL PUMPS IN HORIZONTAL VERSION

FLUX CENTRIFUGAL IMMERSION PUMP F 706 PP IN POLYPROPYLENE SIZE 135, 185, 230 AND 350

Typical applications

Transfer of corrosive liquids in the chemical industry and all aspects of chemical engineering together with any application that requires the safe and economical transfer, or circulation, of acids and alkalis or other chemical fluids, with or without solids in suspension.

Construction features

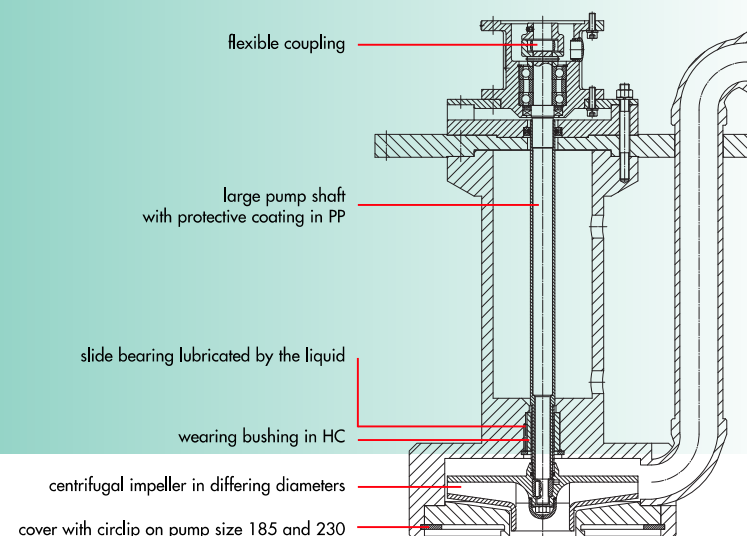
Vertical centrifugal immersion pump for stationary application. The robust pump housing is solidly welded to the support tube. A sleeve bearing, which is lubricated by the liquid, allows immersion lengths of up to 1000 mm, and on the pump size 230, with additional intermediate bearings, even up to 2000 mm. A large polypropylene-coated drive shaft together with the use of a thick-walled support tube ensures a very smooth running pump. This type of construction prevents the rotating components from coming to contact with the pump housing and guarantees a long service life and extended maintenance intervals, even in the case of continuous use.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements. Connection of pump and motor is made via a flexible coupling.



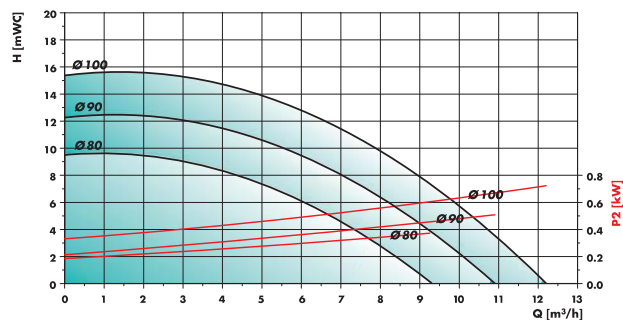
F 706 PP-350

CONSTRUCTION FEATURES IN DETAIL



TECHNICAL DATA

Performance chart F 706 PP-135

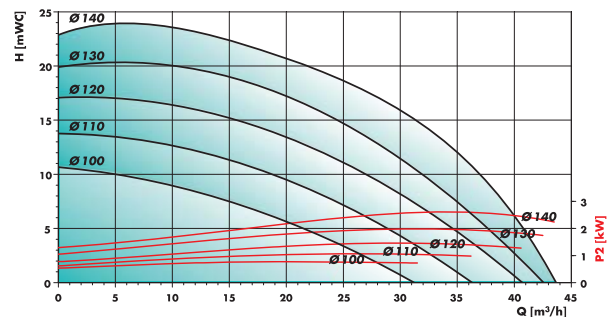


Measured values
± 10% determined with water (20 °C).
Nominal speed n = 2850 rpm

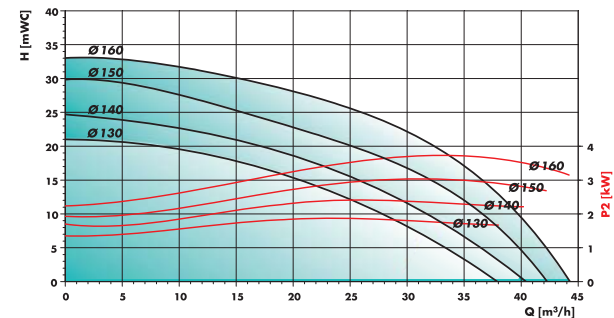
In order to obtain the desired output, centrifugal impellers in differing diameters are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

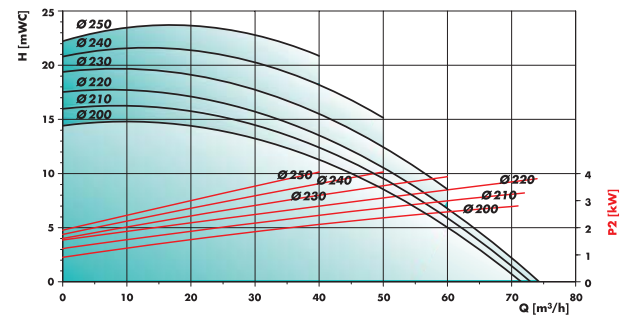
Performance chart F 706 PP-185



Performance chart F 706 PP-230



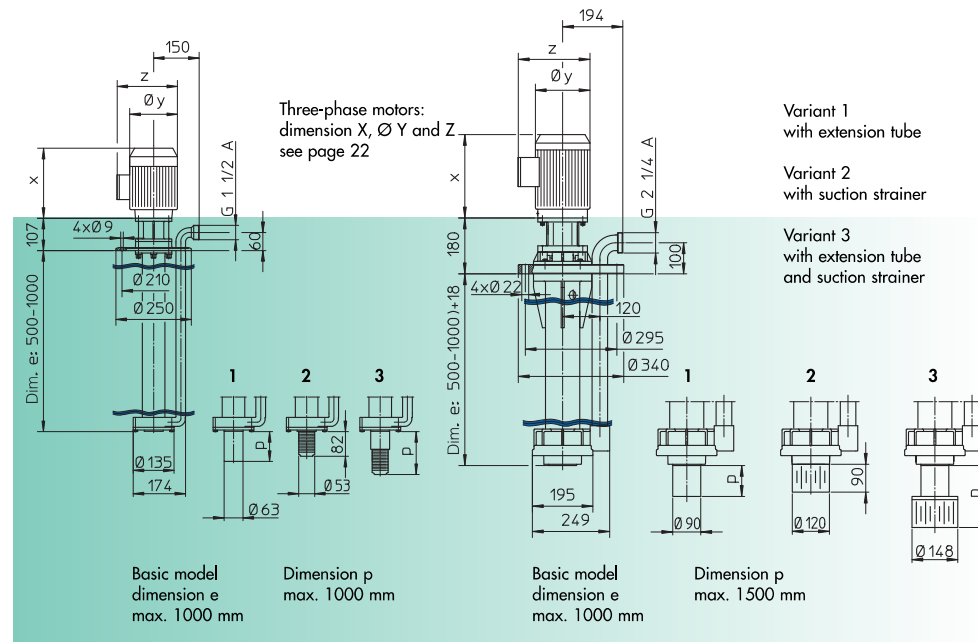
Performance chart F 706 PP-350



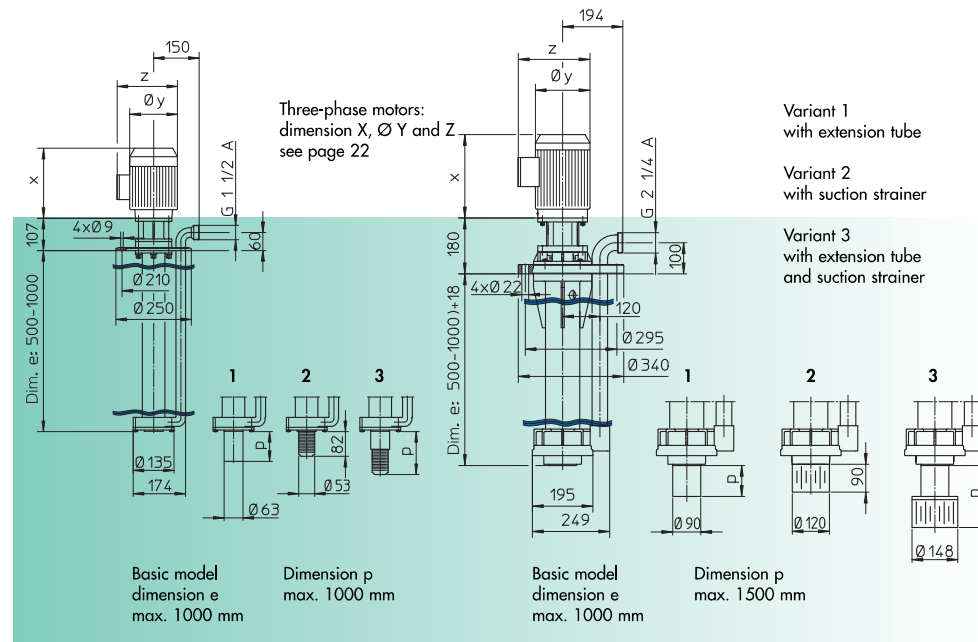
Nominal speed n = 1450 rpm

TECHNICAL DATA

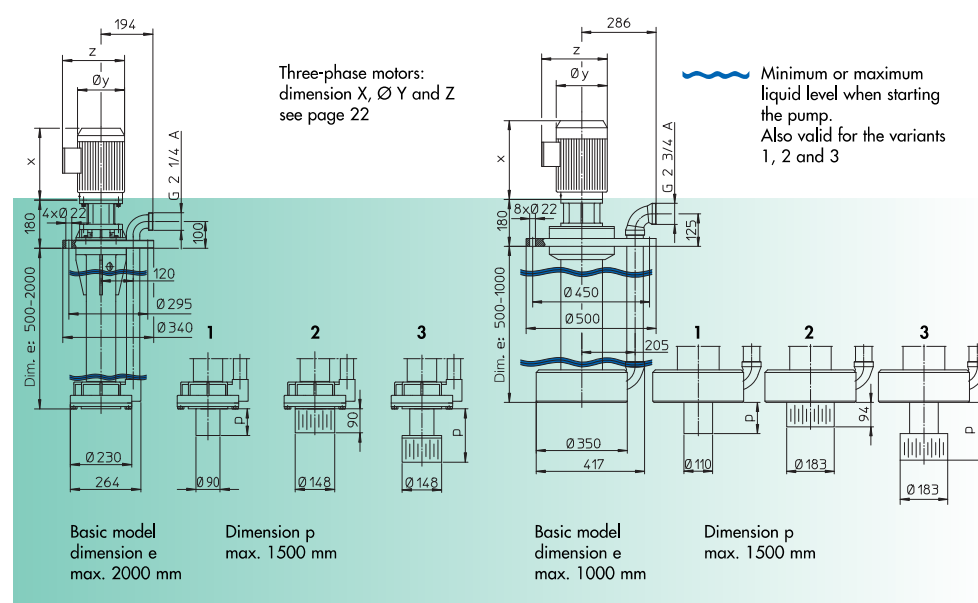
Dimensions F 706 PP-135



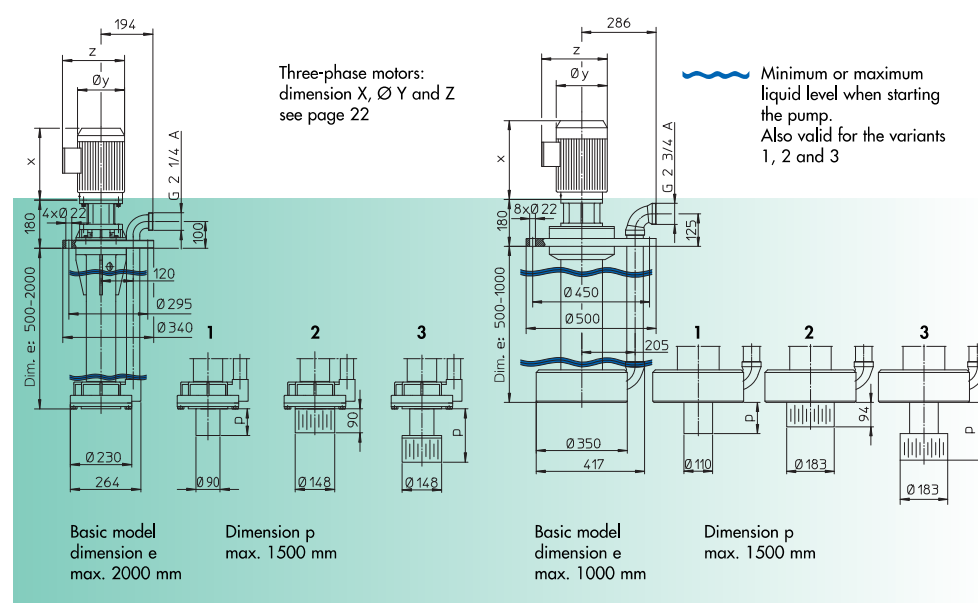
Dimensions F 706 PP-185



Dimensions F 706 PP-230



Dimensions F 706 PP-350



CENTRIFUGAL IMMERSION PUMP F 726 PP IN POLYPROPYLENE AND F 726 PVDF IN POLYVINYLIDENFLUORIDE, VERSION WITH SUPPORT BARS, WITHOUT DRIVE MOTOR

Type / Size	F 726 PP2-185	F 726 PP2-230	F 726 PVDF2-185	F 726 PVDF2-230
Delivery rate Q max.	38 m ³ /h	45 m ³ /h	38 m ³ /h	45 m ³ /h
Delivery head H max.	23 m water column	35 m water column	23 m water column	35 m water column
Viscosity max.	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)
Temperature max.	80 °C	80 °C	100 °C	100 °C
Seal material	no bearings nor seals in contact with the liquid			
Material	shaft in stainless steel 1.4571/316 Ti with protective coating in PP			
Centrifugal impeller in PP or PVDF	Ø 100 – 140 mm	Ø 130 – 160 mm	Ø 100 – 140 mm	Ø 130 – 160 mm
Pump housing	Ø 249 mm	Ø 264 mm	Ø 249 mm	Ø 264 mm
Mounting flange in PP or RCH 1000	outside Ø 340 mm	outside Ø 340 mm	outside Ø 340 mm	outside Ø 340 mm
Thread on outlet	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)
Part No.				
Immersion length	300 mm	726 42 203	726 42 303	726 62 203
Dimension e	400 mm	726 42 204	726 42 304	726 62 204
	500 mm	726 42 205	726 42 305	726 62 205

Accessories:

Extension tube in PP or PVDF in steps of 100 mm, Dimension p up to max. 1500 mm.

Suction strainer in PP or PVDF welded onto the cover of the pump housing or onto the extension tube.

DRIVE MOTOR FOR CENTRIFUGAL IMMERSION PUMP F 726 PP

Three-phase motors protected to IP 55, with cable terminal box

Capacity P 2	Flange Ø	Voltage	Frequency	Nominal speed	Part No.
1,5 kW	160 mm	230/400 V	50 Hz	2850 rpm	001 00 008
2,2 kW	160 mm	230/400 V	50 Hz	2850 rpm	001 00 009
3,0 kW	160 mm	400 V	50 Hz	2850 rpm	001 00 010
4,0 kW	160 mm	400 V	50 Hz	2850 rpm	001 00 011
5,5 kW	160 mm	400 V	50 Hz	2850 rpm	001 00 015

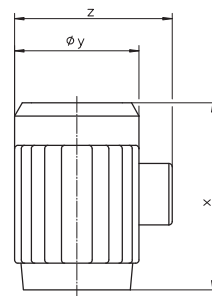
Three-phase motors explosion-proof to EEx e II T3 with cable terminal box on request.

SCOPE OF SUPPLY

A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and the necessary accessories. Weight per pump 25 – 75 kg depending on the pump size, immersion length and motor kW.

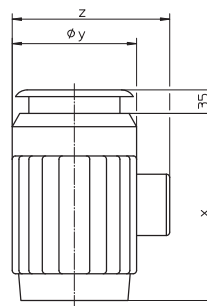
CENTRIFUGAL IMMERSION PUMP F 726 PP AND F 726 PVDF

DIMENSIONS OF THREE-PHASE MOTORS PROTECTED TO IP 55



Capacity P 2	Nominal speed	X	Ø Y	Z
0,37 kW	2850 rpm	201	143	183
0,55 kW	2850 rpm	201	143	183
0,75 kW	2850 rpm	232	158	201
1,1 kW	2850 rpm	232	158	201
1,5 kW	2850 rpm	244	176	227
2,2 kW	2850 rpm	269	176	227
3,0 kW	2850 rpm	303	196	252
4,0 kW	2850 rpm	320	220	277
5,5 kW	2850 rpm	405	246	313
3,0 kW	1450 rpm	303	196	252
4,0 kW	1450 rpm	320	220	277
5,5 kW	1450 rpm	405	246	313

DIMENSIONS OF THREE-PHASE MOTORS EXPLOSION-PROOF TO EEX e II T3



Capacity P 2	Nominal speed	X	Ø Y	Z
0,75 kW	2850 rpm	232	158	212
1,1 kW	2850 rpm	232	158	212
1,5 kW	2850 rpm	244	176	237
2,0 kW	2850 rpm	269	176	237
2,5 kW	2850 rpm	303	196	256
3,3 kW	2850 rpm	320	220	279