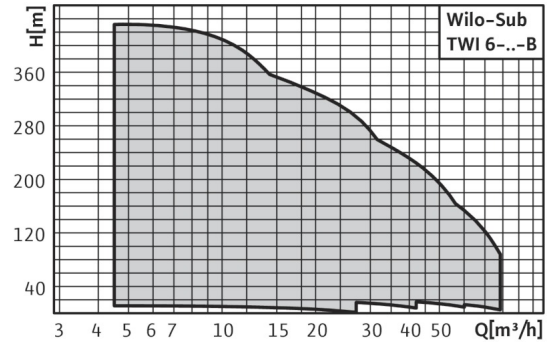


Series description: Wilo-Sub TWI 6...-B



Design

Submersible pump, multistage

Application

- For water and potable water supply from boreholes and rainwater storage tanks
- Process water supply
- For municipal water supply, sprinkling and irrigation
- Pressure boosting
- Lowering the water level
- For pumping water in industrial applications
- For pumping water without long-fibre and abrasive constituents

Type key

Equipment/function

- Multistage submersible-motor pump with radial or semi-axial impellers
- Integrated non-return valve
- NEMA coupling
- Three-phase motor
- Hermetically cast motors
- Rewindable motors

Materials

Standard version:

- Hydraulic housing: Stainless steel 1.4301
- Impellers: Stainless steel 1.4301
- Hydraulics shaft: Stainless steel 1.4057
- Motor housing: ENGJL or stainless steel 1.4301

Series description: Wilo-Sub TWI 6-...-B

Type key, standard version:

e.g.

Wilo-Sub TWI 6.18-04-B-SD-R

TWI

Submersible pump

6

Diameter of the hydraulic unit in inches ["]

18

Nominal volume flow [m³/h]

04

Number of hydraulic stages

B

Series generation

SD

Starting mode

Without = Direct starting

SD = star-delta starting

R

Motor rewindable, without = motor hermetically cast

Type key, configurable version

Example, hydraulics:

e.g.

Wilo-Sub TWI 06.30-29-NB

TWI

Hydraulics

0

Configurable series

6

Diameter of the hydraulic unit in inches ["]

30

Nominal volume flow [m³/h]

29

Number of hydraulic stages

N

Standard impeller diameter

B

Series generation

Example, motor:

NU

- Motor shaft: Stainless steel 1.4305 or 1.4301

Special version:

- Hydraulic housing: Stainless steel 1.4401
- Impellers: Stainless steel 1.5471
- Hydraulics shaft: Stainless steel 1.4401
- Motor housing: Stainless steel 1.4401, 1.4408, 1.4571 (depending on type)
- Motor shaft: Stainless steel 1.4542, 1.4460, 1.4462 (depending on type)

Description/design

Submersible-motor pump for vertical or horizontal installation.

Hydraulics

Multistage submersible-motor pump with 4" or 6" NEMA connection and radial or semi-axial impellers with sectional construction. Integrated non-return valve. All parts in contact with the fluid are made of corrosion-free materials.

Motor

Three-phase motor for direct and star-delta starting Sealed, hermetically cast motor with enamel-insulated winding, resin-impregnated, or rewindable motor with PVC-insulated winding, self-lubricating bearing, with water-glycol filling.

Cooling

The motor is cooled by the fluid. The motor must always be operated in submerged state. The limit values for the max. fluid temperature and the minimum flow rate must not be exceeded. Vertical installation is possible optionally with or without cooling jacket. Cooling jacket is required for horizontal installation.

Pressure shroud

The pressure shroud is used for direct installation of the unit in the pipe system. Standard models are without mounted non-return valves. The maximum inlet pressure is 10 bar.

Configuration

- No suction mode is possible with these units!
- The unit must be fully immersed in water during operation.

Scope of delivery

- Hydraulics + motor fully assembled
- 4/5/10 m connecting cable approved for potable water with standard version models (cross-section: 4x2.5 mm² or 4x4 mm²)
- Cable cross-section and length per customer request for configured material
- Installation and operating instructions

Options

- Hydraulics in stainless steel 1.4401
- Stainless steel motor in 1.4401, 1.4408 or 1.4571
- 60 Hz version
- Star-delta starting
- Rewindable motor
- Rewindable motor with potable water filling
- Configured units for special versions

Series description: Wilo-Sub TWI 6-...-B

Submersible motor

611

Overall size

2

Number of poles

15

Nominal power

Special features/product advantages

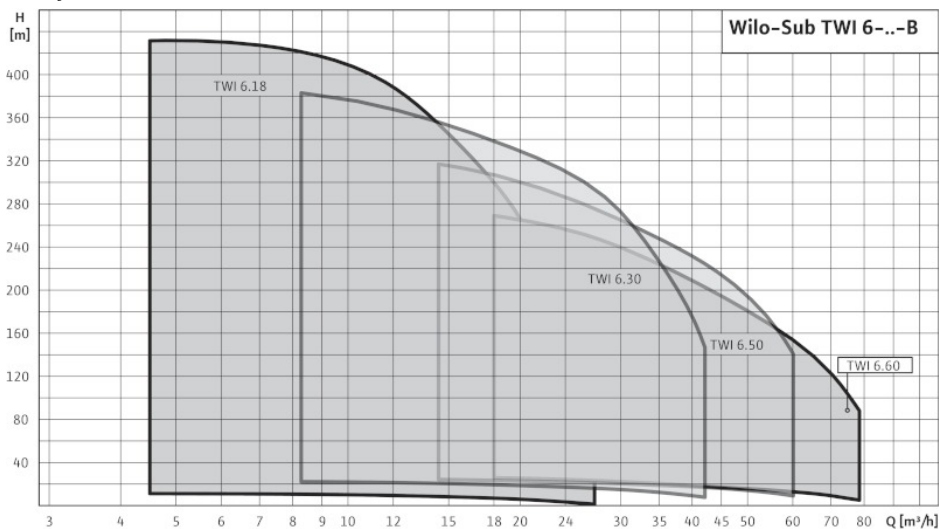
- Easy maintenance due to rapid installation and dismantling
- Integrated non-return valve
- Vertical and horizontal installation possible
- Standard and configurable versions available
- Star/delta starting
- Cast and rewindable motors

Technical data

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
- Fluid temperature: 3-30 °C
- Minimum motor flow:
 - Hermetically cast motors: 0.08 - 0.16 m/s
 - Rewindable motors (SD-R): 0.1-0.5 m/s (depending on type)
- Max. sand content: 50 g/m³
- Max. number of starts: 20/h
- Max. immersion depth:
 - Hermetically cast motors: 350 m
 - Rewindable motors: 100 m
- Protection class: IP 68
- Pressure port: Rp 2½ - Rp 3

Duty chart: Wilo-Sub TWI 6--B

Pump curves



3~400 V, 50 Hz, $\rho = 1 \text{ kg/dm}^3$, $\nu = 1 \times 10^{-6} \text{ m}^2/\text{s}$,
ISO 9906 Annex A, η = pump efficiency

Equipment/function: Wilo-Sub TWI 6...-B

Design

NEMA connection	•
Standardised connection	–
Integrated non-return valve	•
Without non-return valve	–
Single-phase AC motor	–
Three-phase motor	•
Direct activation	•
Star-delta activation	•
FC operation	•
Motor with cast stator	•
Rewindable motor	•
Oil motor filling	–
Water-glycol motor filling	•
Potable water motor filling	optional
Hydraulics/motor preassembled	•

Application

Horizontal installation	•
Vertical installation	•

Equipment/function

Motor temperature monitoring, PT100	optional
Motor temperature monitoring, PTC	optional
Capacitor box for 1~230 V	–
Dry-running protection system	optional
Integrated lightning protection	–

Accessories

Bearing brackets for horizontal installation	optional
Cooling jacket	optional
Non-return valve	–
Pressure shroud	optional

Materials

Pump housing	1.4301
Pump housing (special version)	1.4404
Impeller	1.4301
Impeller (special version)	1.4404
Motor housing	1.4301
Motor housing (special version)	1.4401

• = available, – = not available

Product list: Wilo-Sub TWI 6-.-B

Pump type	Mains connection	Max. volume flow	Max. delivery head	Optimum volume flow	Optimal delivery head	Motor diameter	Pressure connection	Nominal motor power	Art no.
		$Q_{max}/m^3/h$	H_{max}/m	$Q_{opt}/m^3/h$	H_{opt}/m	$\varnothing /"$		P_2/kW	
TWI 6.18-01-B	3~400 V, 50 Hz	27	11	15	8	4	Rp 2½	0.55	6043317
TWI 6.18-02-B	3~400 V, 50 Hz	27	22	15	17	4	Rp 2½	1.50	6043318
TWI 6.18-04-B	3~400 V, 50 Hz	27	42	16	33	4	Rp 2½	2.20	6043319
TWI 6.18-05-B	3~400 V, 50 Hz	27	53	16	41	4	Rp 2½	3	6043320
TWI 6.18-06-B	3~400 V, 50 Hz	27	62	16	49	4	Rp 2½	3	6043321
TWI 6.18-07-B	3~400 V, 50 Hz	27	75	16	56	4	Rp 2½	3.70	6043322
TWI 6.18-10-B	3~400 V, 50 Hz	27	108	16	83	4	Rp 2½	5.50	6043323
TWI 06.18-10-NB	3~400 V, 50 Hz	27	108	16	83	6	Rp 2½	5.50	
TWI 6.18-13-B	3~400 V, 50 Hz	27	140	16	109	6	Rp 2½	7.50	6043324
TWI 06.18-13-NB	3~400 V, 50 Hz	27	140	16	109	6	Rp 2½	7.50	
TWI 6.18-17-B	3~400 V, 50 Hz	27	183	16	143	6	Rp 2½	9.30	6043325
TWI 06.18-17-NB	3~400 V, 50 Hz	27	183	16	143	6	Rp 2½	9.20	
TWI 6.18-20-B	3~400 V, 50 Hz	27	212	16	168	6	Rp 2½	11	6043326
TWI 6.18-20-B-SD-R	3~400 V, 50 Hz	27	212	16	168	6	Rp 2½	11	6047769
TWI 6.18-20-B-SD	3~400 V, 50 Hz	27	212	16	168	6	Rp 2½	11	6043341
TWI 6.18-22-B	3~400 V, 50 Hz	27	238	15	197	6	Rp 2½	15	6043327
TWI 6.18-22-B-SD-R	3~400 V, 50 Hz	27	238	15	197	6	Rp 2½	13	6047770
TWI 6.18-22-B-SD	3~400 V, 50 Hz	27	238	15	197	6	Rp 2½	15	6043342
TWI 6.18-24-B	3~400 V, 50 Hz	27	258	16	196	6	Rp 2½	15	6043328
TWI 6.18-24-B-SD-R	3~400 V, 50 Hz	27	258	16	196	6	Rp 2½	13	6047771
TWI 6.18-24-B-SD	3~400 V, 50 Hz	27	258	16	196	6	Rp 2½	15	6043343
TWI 6.18-27-B	3~400 V, 50 Hz	27	290	16	226	6	Rp 2½	15	6043329
TWI 6.18-27-B-SD-R	3~400 V, 50 Hz	27	290	16	226	6	Rp 2½	15	6047772
TWI 6.18-27-B-SD	3~400 V, 50 Hz	27	290	16	226	6	Rp 2½	15	6043344
TWI 6.18-29-B	3~400 V, 50 Hz	27	317	16	243	6	Rp 2½	18.50	6043330
TWI 6.18-29-B-SD-R	3~400 V, 50 Hz	27	317	16	243	6	Rp 2½	18.50	6047773
TWI 6.18-29-B-SD	3~400 V, 50 Hz	27	317	16	243	6	Rp 2½	18.50	6043345
TWI 6.18-31-B	3~400 V, 50 Hz	27	333	16	261	6	Rp 2½	18.50	6043336
TWI 6.18-31-B-SD-R	3~400 V, 50 Hz	27	333	16	261	6	Rp 2½	18.50	6047774



Product list: Wilo-Sub TWI 6-..-B

Pump type	Mains connection	Max. volume flow	Max. delivery head	Optimum volume flow	Optimal delivery head	Motor diameter	Pressure connection	Nominal motor power	Art no.
		$Q_{max}/m^3/h$	H_{max}/m	$Q_{opt}/m^3/h$	H_{opt}/m	$\varnothing /"$		P_2/kW	
TWI 6.18-31-B-SD	3~400 V, 50 Hz	27	333	16	261	6	Rp 2½	18.50	6043346
TWI 6.18-33-B	3~400 V, 50 Hz	27	351	15	284	6	Rp 2½	18.50	6043337
TWI 6.18-33-B-SD-R	3~400 V, 50 Hz	27	351	15	284	6	Rp 2½	18.50	6047775
TWI 6.18-33-B-SD	3~400 V, 50 Hz	27	351	15	284	6	Rp 2½	18.50	6043347
TWI 6.18-36-B	3~400 V, 50 Hz	27	387	16	307	6	Rp 2½	22	6043338
TWI 6.18-36-B-SD-R	3~400 V, 50 Hz	27	387	16	307	6	Rp 2½	22	6047776
TWI 6.18-36-B-SD	3~400 V, 50 Hz	27	387	16	307	6	Rp 2½	22	6043348
TWI 6.18-38-B	3~400 V, 50 Hz	27	407	16	319	6	Rp 2½	22	6043339
TWI 6.18-38-B-SD-R	3~400 V, 50 Hz	27	407	16	319	6	Rp 2½	22	6047777
TWI 6.18-38-B-SD	3~400 V, 50 Hz	27	407	16	319	6	Rp 2½	22	6043349
TWI 6.18-40-B	3~400 V, 50 Hz	27	427	16	337	6	Rp 2½	22	6043340
TWI 6.18-40-B-SD-R	3~400 V, 50 Hz	27	427	16	337	6	Rp 2½	22	6047778
TWI 6.18-40-B-SD	3~400 V, 50 Hz	27	427	16	337	6	Rp 2½	22	6043350
TWI 6.30-02-B	3~400 V, 50 Hz	42	22	28	15	4	Rp 3	2.20	6043406
TWI 6.30-03-B	3~400 V, 50 Hz	42	32	28	23	4	Rp 3	3	6043407
TWI 6.30-04-B	3~400 V, 50 Hz	42	43	28	31	4	Rp 3	3.70	6043408
TWI 06.30-04-NB	3~400 V, 50 Hz	42	43	28	31	6	Rp 3	5.50	
TWI 6.30-06-B	3~400 V, 50 Hz	42	67	28	48	4	Rp 3	5.50	6043409
TWI 06.30-06-NB	3~400 V, 50 Hz	42	67	28	48	6	Rp 3	5.50	
TWI 6.30-08-B	3~400 V, 50 Hz	42	88	27	63	6	Rp 3	7.50	6043410
TWI 06.30-08-NB	3~400 V, 50 Hz	42	88	27	63	6	Rp 3	7.50	
TWI 6.30-11-B	3~400 V, 50 Hz	42	122	28	88	6	Rp 3	11	6043411
TWI 6.30-11-B-SD	3~400 V, 50 Hz	42	122	28	88	6	Rp 3	11	6043427
TWI 06.30-11-NB	3~400 V, 50 Hz	42	122	28	88	6	Rp 3	11	
TWI 6.30-13-B	3~400 V, 50 Hz	42	142	28	102	6	Rp 3	15	6043412
TWI 6.30-13-B-SD	3~400 V, 50 Hz	42	142	28	102	6	Rp 3	15	6043428
TWI 06.30-13-NB	3~400 V, 50 Hz	42	142	28	102	6	Rp 3	13	
TWI 6.30-15-B	3~400 V, 50 Hz	42	168	29	119	6	Rp 3	15	6043418
TWI 6.30-15-B-SD	3~400 V, 50 Hz	42	168	29	119	6	Rp 3	15	6043429

Product list: Wilo-Sub TWI 6-..-B

Pump type	Mains connection	Max. volume flow	Max. delivery head	Optimum volume flow	Optimal delivery head	Motor diameter	Pressure connection	Nominal motor power	Art no.
		$Q_{max}/m^3/h$	H_{max}/m	$Q_{opt}/m^3/h$	H_{opt}/m	$\varnothing /"$		P_2/kW	
TWI 06.30-15-NB	3~400 V, 50 Hz	42	168	29	119	6	Rp 3	15	
TWI 6.30-17-B	3~400 V, 50 Hz	42	187	29	132	6	Rp 3	15	6043419
TWI 6.30-17-B-SD-R	3~400 V, 50 Hz	42	187	29	132	6	Rp 3	15	6047779
TWI 6.30-17-B-SD	3~400 V, 50 Hz	42	187	29	132	6	Rp 3	15	6043430
TWI 6.30-19-B	3~400 V, 50 Hz	42	207	29	145	6	Rp 3	18.50	6043420
TWI 6.30-19-B-SD-R	3~400 V, 50 Hz	42	207	29	145	6	Rp 3	18.50	6047780
TWI 6.30-19-B-SD	3~400 V, 50 Hz	42	207	29	145	6	Rp 3	18.50	6043431
TWI 6.30-21-B	3~400 V, 50 Hz	42	225	29	155	6	Rp 3	18.50	6043421
TWI 6.30-21-B-SD-R	3~400 V, 50 Hz	42	225	29	155	6	Rp 3	18.50	6047781
TWI 6.30-21-B-SD	3~400 V, 50 Hz	42	225	29	155	6	Rp 3	18.50	6043432
TWI 6.30-24-B	3~400 V, 50 Hz	42	258	29	188	6	Rp 3	22	6043422
TWI 6.30-24-B-SD-R	3~400 V, 50 Hz	42	258	29	188	6	Rp 3	22	6047782
TWI 6.30-24-B-SD	3~400 V, 50 Hz	42	258	29	188	6	Rp 3	22	6043433
TWI 6.30-26-B	3~400 V, 50 Hz	42	283	29	200	6	Rp 3	30	6043423
TWI 6.30-26-B-SD-R	3~400 V, 50 Hz	42	283	29	241	6	Rp 3	22	6047783
TWI 6.30-26-B-SD	3~400 V, 50 Hz	42	283	29	200	6	Rp 3	30	6043434
TWI 6.30-29-B	3~400 V, 50 Hz	42	322	29	241	6	Rp 3	30	6043424
TWI 6.30-29-B-SD-R	3~400 V, 50 Hz	42	322	29	241	6	Rp 3	30	6047784
TWI 6.30-29-B-SD	3~400 V, 50 Hz	42	322	29	241	6	Rp 3	30	6043435
TWI 6.30-32-B	3~400 V, 50 Hz	42	350	29	252	6	Rp 3	30	6043425
TWI 6.30-32-B-SD-R	3~400 V, 50 Hz	42	350	29	252	6	Rp 3	30	6047785
TWI 6.30-32-B-SD	3~400 V, 50 Hz	42	350	29	252	6	Rp 3	30	6043436
TWI 6.30-35-B	3~400 V, 50 Hz	42	380	29	277	6	Rp 3	30	6043426
TWI 6.30-35-B-SD-R	3~400 V, 50 Hz	42	380	29	277	6	Rp 3	30	6047786
TWI 6.30-35-B-SD	3~400 V, 50 Hz	42	380	29	277	6	Rp 3	30	6043437
TWI 6.50-02-B	3~400 V, 50 Hz	60	21	43	17	4	Rp 3	3	6043465
TWI 6.50-03-B	3~400 V, 50 Hz	60	40	42	27	4	Rp 3	5.50	6043466
TWI 6.50-05-B	3~400 V, 50 Hz	60	61	43	43	6	Rp 3	7.50	6043467
TWI 06.50-05-NB	3~400 V, 50 Hz	60	61	43	43	6	Rp 3	7.50	

Product list: Wilo-Sub TWI 6-..-B

Pump type	Mains connection	Max. volume flow	Max. delivery head	Optimum volume flow	Optimal delivery head	Motor diameter	Pressure connection	Nominal motor power	Art no.
		$Q_{max}/m^3/h$	H_{max}/m	$Q_{opt}/m^3/h$	H_{opt}/m	$\varnothing /"$		P_2/kW	
TWI 6.50-07-B	3~400 V, 50 Hz	60	91	44	61	6	Rp 3	11	6043468
TWI 6.50-07-B-SD	3~400 V, 50 Hz	60	91	44	61	6	Rp 3	11	6043476
TWI 06.50-07-NB	3~400 V, 50 Hz	60	91	44	61	6	Rp 3	11	
TWI 6.50-10-B	3~400 V, 50 Hz	60	130	45	86	6	Rp 3	15	6043469
TWI 6.50-10-B-SD	3~400 V, 50 Hz	60	130	45	86	6	Rp 3	15	6043477
TWI 06.50-10-NB	3~400 V, 50 Hz	60	130	45	86	6	Rp 3	15	
TWI 6.50-12-B	3~400 V, 50 Hz	60	158	44	105	6	Rp 3	18.50	6043470
TWI 6.50-12-B-SD	3~400 V, 50 Hz	60	158	44	105	6	Rp 3	18.50	6043478
TWI 06.50-12-NB	3~400 V, 50 Hz	60	158	44	105	6	Rp 3	18.50	
TWI 6.50-15-B	3~400 V, 50 Hz	60	198	45	131	6	Rp 3	22	6043471
TWI 6.50-15-B-SD-R	3~400 V, 50 Hz	60	198	45	131	6	Rp 3	22	6047787
TWI 6.50-15-B-SD	3~400 V, 50 Hz	60	198	45	131	6	Rp 3	22	6043479
TWI 6.50-17-B	3~400 V, 50 Hz	60	225	46	148	6	Rp 3	30	6043472
TWI 6.50-17-B-SD-R	3~400 V, 50 Hz	60	225	46	148	6	Rp 3	26	6047788
TWI 6.50-17-B-SD	3~400 V, 50 Hz	60	225	46	148	6	Rp 3	30	6043480
TWI 6.50-19-B	3~400 V, 50 Hz	60	252	45	166	6	Rp 3	30	6043473
TWI 6.50-19-B-SD-R	3~400 V, 50 Hz	60	252	45	166	6	Rp 3	30	6047789
TWI 6.50-19-B-SD	3~400 V, 50 Hz	60	252	45	166	6	Rp 3	30	6043481
TWI 6.50-22-B	3~400 V, 50 Hz	60	290	46	188	6	Rp 3	37	6043474
TWI 6.50-22-B-SD-R	3~400 V, 50 Hz	60	290	46	188	6	Rp 3	34	6047790
TWI 6.50-22-B-SD	3~400 V, 50 Hz	60	290	46	188	6	Rp 3	37	6043482
TWI 6.50-24-B	3~400 V, 50 Hz	60	320	47	205	6	Rp 3	37	6043475
TWI 6.50-24-B-SD-R	3~400 V, 50 Hz	60	320	47	205	6	Rp 3	34	6047791
TWI 6.50-24-B-SD	3~400 V, 50 Hz	60	320	47	205	6	Rp 3	37	6043483
TWI 6.60-02-B	3~400 V, 50 Hz	78	29	50	16	4	Rp 3	3.70	6044818
TWI 6.60-03-B	3~400 V, 50 Hz	78	41	52	24	4	Rp 3	5.50	6043504
TWI 6.60-04-B	3~400 V, 50 Hz	78	53	54	32	6	Rp 3	7.50	6043505
TWI 06.60-04-NB	3~400 V, 50 Hz	78	53	54	32	6	Rp 3	7.50	
TWI 6.60-06-B	3~400 V, 50 Hz	78	80	56	47	6	Rp 3	11	6043506

Product list: Wilo-Sub TWI 6-.-B

Pump type	Mains connection	Max. volume flow	Max. delivery head	Optimum volume flow	Optimal delivery head	Motor diameter	Pressure connection	Nominal motor power	Art no.
		$Q_{max}/m^3/h$	H_{max}/m	$Q_{opt}/m^3/h$	H_{opt}/m	$\varnothing /"$		P_2/kW	
TWI 6.60-06-B-SD	3~400 V, 50 Hz	78	80	56	47	6	Rp 3	11	6043514
TWI 06.60-06-NB	3~400 V, 50 Hz	78	80	56	47	6	Rp 3	11	
TWI 6.60-08-B	3~400 V, 50 Hz	78	108	57	64	6	Rp 3	15	6043507
TWI 6.60-08-B-SD	3~400 V, 50 Hz	78	108	57	64	6	Rp 3	15	6043515
TWI 06.60-08-NB	3~400 V, 50 Hz	78	108	57	64	6	Rp 3	15	
TWI 6.60-10-B	3~400 V, 50 Hz	78	131	57	76	6	Rp 3	18.50	6043508
TWI 6.60-10-B-SD	3~400 V, 50 Hz	78	131	57	76	6	Rp 3	18.50	6043516
TWI 06.60-10-NB	3~400 V, 50 Hz	78	131	57	76	6	Rp 3	18.50	
TWI 6.60-12-B	3~400 V, 50 Hz	78	161	58	95	6	Rp 3	22	6043509
TWI 6.60-12-B-SD	3~400 V, 50 Hz	78	161	58	95	6	Rp 3	22	6043517
TWI 06.60-12-NB	3~400 V, 50 Hz	78	161	58	95	6	Rp 3	22	
TWI 6.60-14-B	3~400 V, 50 Hz	78	190	58	113	6	Rp 3	30	6043510
TWI 6.60-14-B-SD-R	3~400 V, 50 Hz	78	190	58	113	6	Rp 3	26	6047792
TWI 6.60-14-B-SD	3~400 V, 50 Hz	78	190	58	113	6	Rp 3	30	6043518
TWI 6.60-16-B	3~400 V, 50 Hz	78	215	53	136	6	Rp 3	30	6043511
TWI 6.60-16-B-SD-R	3~400 V, 50 Hz	78	215	53	136	6	Rp 3	30	6047793
TWI 6.60-16-B-SD	3~400 V, 50 Hz	78	215	53	136	6	Rp 3	30	6043519
TWI 6.60-18-B	3~400 V, 50 Hz	78	245	59	143	6	Rp 3	30	6043512
TWI 6.60-18-B-SD-R	3~400 V, 50 Hz	78	245	59	143	6	Rp 3	30	6047794
TWI 6.60-18-B-SD	3~400 V, 50 Hz	78	245	59	143	6	Rp 3	30	6043520
TWI 6.60-20-B	3~400 V, 50 Hz	78	270	58	158	6	Rp 3	37	6043513
TWI 6.60-20-B-SD-R	3~400 V, 50 Hz	78	270	58	158	6	Rp 3	34	6047795
TWI 6.60-20-B-SD	3~400 V, 50 Hz	78	270	58	158	6	Rp 3	37	6043521