



Hänel Rotomat Technical Information for Power Connection

NOTE: THIS INFORMATION IS PROVIDED AS A GENERAL GUIDE FOR THE POWER CONNECTION FOR THE HÄNEL ROTOMAT. ADDITIONAL INFORMATION WILL BE FOUND ON THE SPECIFICATION LABEL OF EACH ROTOMAT.

Power Supply Connection

Unless otherwise agreed when placing the order, for a three phase drive the electrical components must be equipped with a separate neutral (when required) and ground wire in the entire power system (TN-S power system in accordance with IEC 60364-1). Therefore, the connection to the power supply must have the following conductors:

If using a 208v connection:

- 3 Power Conductors
- 1 Neutral Conductor
- 1 Ground Conductor

If using a 480v connection:

- 3 Power Conductors
- 1 Ground Conductor

For Rotomat versions with a frequency converter, 1 additional separate ground conductor is required.

For all other voltage connections, please contact service at 1-800-ROTOMAT to get additional connection information.

The permitted supply voltage and the required customer-side fuse protection are specified on the type plate. In addition, specific local circumstances may need to be considered when connecting the carousel to the power supply. Contact the responsible energy company for more information on these connection conditions.

Circuit Breaker

Each Hänel machine requires it's own individual circuit breaker.

Residual Current Circuit Breakers

If the owner/operator employs residual current circuit breakers, these must conform to EN 50178 or IEC 755. For carousels with a frequency converter universal, time-delayed, residual current circuit breakers (type B) must be used.

Ground Wire

All conductive parts, which can take voltage directly in the event of a fault, must be connected to the ground wire connection.

Wiring Installation

The wiring installation provided by the owner/operator must conform to the following standards:

- IEC 60364-4-43:1977, IEC 60364-4-473:1977, IEC 60364-5-52:1993

Instructions for Motor Fuses:

- The short circuit and overload protection switch installed in all ROTOMAT types is set to the nominal current specified above (tolerance + 0% to + 5%).
- Additional thermal sensors are fitted in the motors of all types, causing a safety stop if the motor coils heat up beyond the permitted limit.
- The current which blocks the motor is around three times the motor's nominal current. The overload safety switch is triggered if it is subjected to three times the nominal current when the motor is cold after around 30 seconds and when it is warm after around 5-10 seconds.

Electrical connection of the carousel

For the Rotomat, the owner/operator has to provide an electrical connection before beginning the installation in accordance with following remarks. To do so, please observe the Power Supply and Foundation Plan as well.

The owner/operator has to provide at least one suitable power socket for installing the carousel using the necessary tools, such as electric screwdrivers etc.



! DANGER

If work on the electrical equipment is not carried out properly, there is a risk of fatal injury!

- Therefore, these tasks may be performed by qualified electricians only.



! DANGER

There is a risk of fatal injury when working on the live electrical system!

The power supply cable may be connected to the power supply terminal strip only by an electrically skilled person provided by the owner/operator and has to remain de-energized until the on-site installation supervisors approve it for being switched on.

The electrically skilled person is allowed to enter the carousel only in the presence of the on-site installation supervisors.

Observe:

The cable entry point with a universal cable gland for the owner/operator's power line is located on the left side of the rear side of the carousel.

Any deviations must be specified when placing the order and described in the order confirmation.

Connection variants

The following connection variants exist depending on the version:

A Type 200, 300-800, 860 in versions /100, /115, /125
Wiring cabinet **below** the access opening

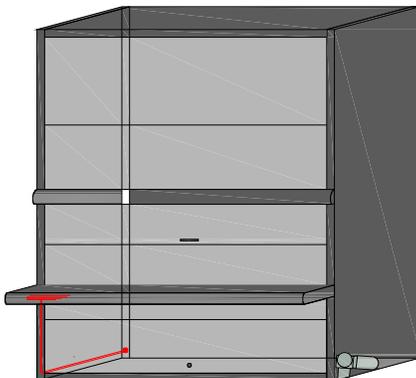


Fig. 25: Electrical connection below access point, 1 drive

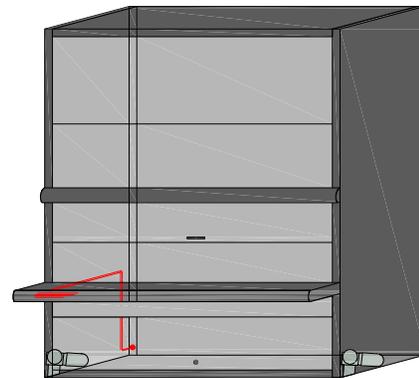


Fig. 26: Electrical connection below access point, 2 drives

Connection variants (continued)

B Type 200, 300-800, 860 in versions /100, /115, /125
Wiring cabinet **above** the access opening
Type 900/100, 900/115 and 900/125

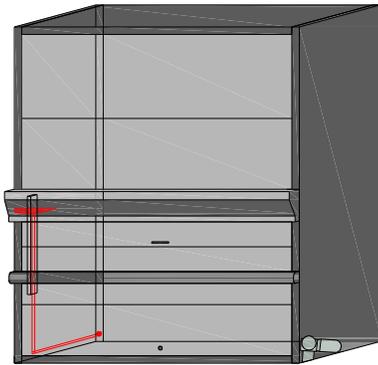


Fig. 27: Electrical connection above access point, 1 drive

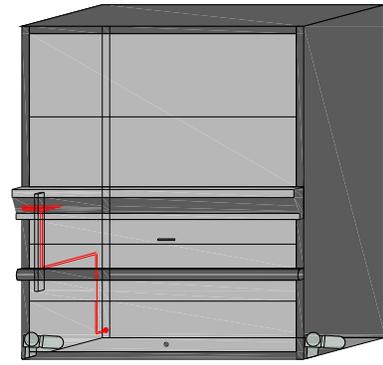


Fig. 28: Electrical connection above access point, 2 drives

C Type 936, 936 D, 946, 946 D, 950, 956, 956 D, 970, 980, 980 D, 985, 985S, 990 and 995

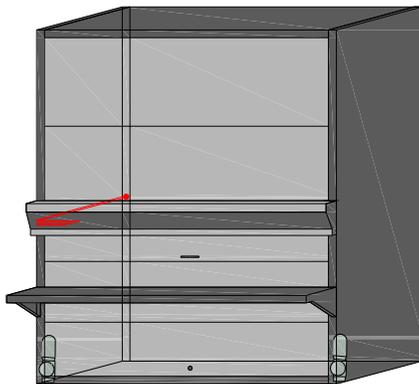


Fig. 29: Electrical connection for types 936 to 995

Mains power supply connection and wire cross-sections

The carousel's electrical equipment is designed as standard for connection to three-phase AC current TN power system (L1/L2/L3/N*/PE) in accordance with IEC 60364-1 (separate neutral and ground wire in the same power system):

3 Outer conductors (for the wire cross-section, see following table)

1 neutral conductor (for the wire cross-section, see the following table) * 208v connection only

1 ground wire (for the wire cross-section, see the following tables)

For the carousel version with a frequency converter:

1 additional separate ground conductor (wire cross-section, at least 2.5 mm²) in accordance with IEC 60204-1 (due to the leakage current of the frequency converter > 3.5 mA).

- A connection to three-phase AC current TN power system (L1/L2/L3/PE) without neutral conductor can be optionally provided at a surcharge:

3 Outer conductors (for the wire cross-section, see following table)

1 ground wire (for the wire cross-section, see the following tables)

For carousel versions with a frequency converter:

1 additional separate ground conductor (wire cross-section, at least 2.5 mm²) in accordance with IEC 60204-1 (due to the leakage current of the frequency converter > 3.5 mA).

- A connection to one-phase AC current TN power system (L1/N/PE) (only with frequency converter) can be optionally provided at a surcharge:

1 Outer conductor (for the wire cross-section, see following table)

1 neutral conductor (for the wire cross-section, see the following table)

1 ground wire (for the wire cross-section, see the following tables)

1 additional separate ground conductor (wire cross-section, at least 2.5 mm²) in accordance with IEC 60204-1 (due to the leakage current of the frequency converter > 3.5 mA).

All other power supply systems are to be coordinated with the supplied carousel by owner/operator in coordination with the responsible energy company.

The owner/operator must observe the following:

The power supply voltage and fuse protection for the power line provided by owner/operator

- must conform to the specifications on the type plate.

If the customer employs a residual current circuit breaker at the owner/operator's location,

- a "universal, time-delayed residual current circuit breaker (Type B)" is required in accordance with EN 50178 or IEC 755.

Wiring installation

The wiring installation provided by the owner/operator must conform to the following standards:

- IEC 60364-4-43
- IEC 60364-5-52

Observe:

The owner/operator has to find out the specific on-site connection conditions (mains power system, voltage and frequency) from the responsible energy company and supply this information when ordering.

Observe:

The Rotomat with frequency converter requires an additional separate ground wire in accordance with IEC 60204-1 due to the leakage current >3.5mA.

Observe:

The following technical connection conditions for the responsible energy company apply.

Wire cross-sections and fuse protection (continued)

Wire cross-section

Select the minimum wire cross-section for the power line provided by owner/operator depending on the carousel power/type using the following table.

The following standards are used as a base:

- IEC 60364-5-52, table B.52-1, B.52-2 and B.52-4 in the A2 method of installation, or the
- NFPA 79 (National Fire Protection Association), Table 12.5.1.

Selecting the fuse protection

As a safety device for protection from overload and short-circuits in the power line provided by owner/operator, the following safety devices are recommended according to IEC 60364-4-43:

- Miniature circuit breaker with overcurrent and short-circuit release
- Fuses with gG characteristic fuse links (standard type: full-range protection, general application).

However, the customer-side or owner/operator specifications are authoritative in this context.



Note:

The impedance of the energy supply, including the power line to the power supply terminal strip of the carousel at the owner/operator's location must not exceed 500 mOhm.

Observe:

The nominal power supply current has been taken into account for the required wire cross-section.

For carousels with a frequency converter, the minimum wire cross-section is higher than the standard specification in individual cases due to the possible voltage drop in the power line.

Note:

The **motor power** is specified in the order confirmation.

(e.g.: 400 volts of three-phase current 50 Hz, 2 x 1.1/1.5 KW of two-speed motors, 20% duty cycle).

Observe:

If the customer employs a residual current circuit breaker at the installation site for carousels with a frequency converter, "a universal, time-delayed residual current circuit breaker (Type B)" is required in accordance with EN 50178 or IEC 755. For carousels with a frequency converter, due to the soft starter with frequency converter, no current surges need to be taken into account for designing the fuse protection.

For carousels without a frequency converter, due to the two-speed motor, no current surges need to be taken into account for designing the fuse protection (maximum 1.25 x nominal power supply current).

Electrical Connection Values

Motor Values Based on Machine Type

Rotomat with a 60 Hz power supply PH = Number of phases of the power supply

Rotomat	Outside width of the carousel	Drive power	Voltage on the drive		
			220V	208V	480V
			Nominal motor current in amperes		
			A	A	A
Type 200		0.9/1.3 kW (1.2/1.8 HP), 3 PH	7,2	7,6	3,3
Type 200/970		1.1/1.5 kW (1.5/2.0 HP), 3 PH	8,2	8,6	3,8
Type 100,115	- 2.6 m (102.4") width				
- up to 3 m (118.1") height		0.9/1.3 kW (1.2/1.8 HP), 3 PH	7,2	7,6	3,3
- up to 3.5 m (137.8") height		1.1/1.5 kW (1.5/2.0 HP), 3 PH	8,2	8,6	3,8
Type 100,115	2.61 m (102.8") - 2.85 m (112.2") width				
- up to 2.4 m (94.5") height		0.9/1.3 kW (1.2/1.8 HP), 3 PH	7,2	7,6	3,3
- up to 3.24 m (127.6") height		1.1/1.5 kW (1.5/2.0 HP), 3 PH	8,2	8,6	3,8
Type 100,115	2.86 m (112.6") - 3.27 m (128.7") width				
- up to 4 m (157.5") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 5.5 m (216.5") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 100,115	> 3.27 m (128.7") width				
- up to 2.5 m (98.4") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 4.0 m (157.5") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 125	- 2.6 m (102.4") width				
- up to 3 m (118.1") height		0.9/1.3 kW (1.2/1.8 HP), 3 PH	7,2	7,6	3,3
- up to 3.5 m (137.8") height		1.1/1.5 kW (1.5/2.0 HP), 3 PH	8,2	8,6	3,8
Type 125	2.61 m (102.8") - 2.86 m (112.6") width				
- up to 3.5 m (137.8") height		1.1/1.5 kW (1.5/2.0 HP), 3 PH	8,2	8,6	3,8
- greater height (greater loss of width)		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 125	2.87 m (113.0") - 3.28 m (129.1") width				
- up to 2.56 m (100.8") height		1.1/1.5 kW (1.5/2.0 HP), 3 PH	8,2	8,6	3,8
- up to 3.5 m (137.8") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 4.5 m (177.2") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 125	> 3.28 m (129.1") width				
- up to 2.5 m (98.4") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 4.0 m (157.5") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 936/3.42 m, 970/3.42 m					
- up to 3.7 m (145.7") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 4.5 m (177.2") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 946/3.42 m					
- up to 3.0 m (118.1") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 3.6 m (141.7") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6

Electrical Connection Values (cont'd)

Motor Values Based on Machine Type

Rotomat with a 60 Hz power supply PH = Number of phases of the power supply

Rotomat	Outside width of the carousel	Drive power	Voltage on the drive		
			220V	208V	480V
			Nominal motor current in amperes		
			A	A	A
Type 950/3.42 m / 229-305,381,419,495, 980/3.42 m / 254-406, 985/3.42 m / 305-406,508 with cross-connected carrier arms					
- up to 3.7 m (145.7") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 4.5 m (177.2") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 950/3.42 m / 343,457,533,571, 980/3.42 m / 457-610, 985/3.42 m / 457,559-609,990/3.42 m, 995/3.42 m without cross-connected carrier arms					
- up to 3.0 m (118.1") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 3.5 m (137.8") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 956/3.42 m					
- up to 2.5 m (98.4") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 3.5 m (137.8") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 985S/3.42 m / 305-406.508 with cross-connected carrier arms					
- up to 3.0 m (118.1") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 3.6 m (141.7") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
Type 985S/3.42 m / 457,559-609 without cross-connected carrier arms					
- up to 2.5 m (98.4") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 3.0 m (118.1") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
For extra-wide versions: 936,946,950,956,970,980,985,985S/160,985S/172,990,995					
- up to 2.0 m (78.7") height		2x 0.9/1.3 kW (2x 1.2/1.8 HP), 3 PH	14,4	15,2	6,6
- up to 2.5 m (98.4") height		2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
For greater heights:	instead of	1x 1.1/1.5 kW (1x 1.5/2.0 HP), 3 PH	8,2	8,6	3,8
	use	1x 1.15/1.6 kW (1x 1.55/2.2 HP), 3 PH	8,9	9,3	4,1
	or instead of	2x 1.1/1.5 kW (2x 1.5/2.0 HP), 3 PH	16,4	17,2	7,6
	use	2x 1.15/1.6 kW (2x 1.55/2.2 HP), 3 PH	17,8	18,6	8,2

Minimum wire cross-section and maximum fuse protection for the power line for which owner/operator is responsible

Rotomat with two-speed motors (without frequency converter)

The following provides an overview of the minimum wire cross-section according to IEC 60364-5-52 and NFPA 79 as well as the maximum fuse protection due to the carousel's internal wiring.

Observe:

The fuse protection on the power supply side for which owner/operator is responsible is selected according to IEC 60364-4-43.

The maximum fuse protection on the power supply side listed in the following table refers to the carousel's internal wiring and may not be exceeded.

Connection to the 60 Hz power supply

Motor power	Power frequency	Minimum wire cross-section according to IEC 60364-5-52 Table B.52.4				Maximum safety device on the power supply side	
		220V	240V	400V	440V	220 – 400 V	400 – 440 V
1 x 0.9/1.3 KW	60 Hz	5 x 1.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	15A	15A
1 x 1.1/1.5 KW	60 Hz	5 x 1.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	15A	15A
1 x 1.15/1.6 KW	60 Hz	5 x 1.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	15A	15A
2 x 0.9/1.3 KW	60 Hz	5 x 2.5 mm ²	5 x 2.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	20A	15A
2 x 1.1/1.5 KW	60 Hz	5 x 2.5 mm ²	5 x 2.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	20A	15A
2 x 1.15/1.6 KW	60 Hz	5 x 4.0 mm ²	5 x 2.5 mm ²	5 x 1.5 mm ²	5 x 1.5 mm ²	25A	15A

Table 2: Minimum wire cross-section according to IEC 60364-5-52 on the 60 Hz power supply

Motor power	Power frequency	Minimum wire cross-section according to NFPA79 Table 12.5.1				Maximum safety device on the power supply side	
		208V	220V	460V	480V	208 – 220 V	460 – 480 V
1 x 0.9/1.3 KW	60 Hz	5 x AWG 14	5 x AWG 14	5 x AWG 14	5 x AWG 14	20A	20A
1 x 1.1/1.5 KW	60 Hz	5 x AWG 14	5 x AWG 14	5 x AWG 14	5 x AWG 14	20A	20A
1 x 1.15/1.6 KW	60 Hz	5 x AWG 14	5 x AWG 14	5 x AWG 14	5 x AWG 14	20A	20A
2 x 0.9/1.3 KW	60 Hz	5 x AWG 14	5 x AWG 14	5 x AWG 14	5 x AWG 14	20A	20A
2 x 1.1/1.5 KW	60 Hz	5 x AWG 14	5 x AWG 14	5 x AWG 14	5 x AWG 14	20A	20A
2 x 1.15/1.6 KW	60 Hz	5 x AWG 12	5 x AWG 14	5 x AWG 14	5 x AWG 14	25A	25A

Table 3: Minimum wire cross-section according to NFPA 79 (only for use in the USA).

Gauge No.	Cross-section mm ²	Gauge No.	Cross-section mm ²
5 x AWG 16	5 x 1.31 mm ²	5 x AWG 10	5 x 5.26 mm ²
5 x AWG 14	5 x 2.08 mm ²	5 x AWG 8	5 x 8.37 mm ²
5 x AWG 12	5 x 3.31 mm ²	5 x AWG 6	5 x 13.3 mm ²

Table 4: AWG (American Wire Gauge) to wire cross-section [mm²] conversion table

Minimum wire cross-section and maximum fuse protection for the power line for which owner/operator is responsible (continued)

Rotomat with soft start control (with frequency converter)

Connection to the 50/60 Hz AC mains

Motor power	Power frequency	Minimum wire cross-section according to IEC 60364-5-52 Table B.52.2			Maximum safety device on the power supply side
		220V	230V	240V	220 – 240 V
1 x 1.1 KW	50/60 Hz	3 x 1.5 mm ²	3 x 1.5 mm ²	3 x 1.5 mm ²	15A
1 x 1.5 KW	50/60 Hz	3 x 2.5 mm ²	3 x 2.5 mm ²	3 x 2.5 mm ²	20A
2 x 1.1 KW	50/60 Hz	3 x 4.0 mm ²	3 x 4.0 mm ²	3 x 2.5 mm ²	25A

Table 5: Minimum wire cross-section according to IEC 60364-5-52 to the 50/60 Hz AC mains

Motor power	Power frequency	Minimum wire cross-section according to NFPA79 Table 12.5.1		Maximum safety device on the power supply side
		110V	120V	110 - 120V
1 x 1.1 KW	50/60 Hz	3 x AWG 12	3 x AWG 12	25A
1 x 1.5 KW	50/60 Hz	3 x AWG 10	3 x AWG 10	35A
2 x 1.1 KW	50/60 Hz	3 x AWG 8	3 x AWG 8	50A

Table 6: Minimum wire cross-section according to NFPA 79 (only for use in the USA) to the 50/60 Hz AC mains

Gauge No.	Cross-section mm ²	Gauge No.	Cross-section mm ²
5 x AWG 16	5 x 1.31 mm ²	5 x AWG 10	5 x 5.26 mm ²
5 x AWG 14	5 x 2.08 mm ²	5 x AWG 8	5 x 8.37 mm ²
5 x AWG 12	5 x 3.31 mm ²	5 x AWG 6	5 x 13.3 mm ²

Table 7: AWG (American Wire Gauge) to wire cross-section [mm²] conversion table

Power system nominal current values (A) for energy information

Rotomat with two-speed motor (without frequency converter)

You can find an overview of the nominal power consumption of a Rotomat based on the motor power.

The nominal power supply current corresponds to the maximum current and flows only at a rated load.

Observe:

In the following table, the nominal power supply current specification is given based on the power supply voltage as a value range (from - to) for the corresponding carousel power and carousel type. The actual nominal power supply current at a rated load is specified on the carousel type plate.

The **motor power** required for this is specified in the order confirmation. (e.g.: 400 volts of three-phase current 50 Hz, 2 x 1.1/1.5 KW of two-speed motors, 20% duty cycle).

Connection to the 60 Hz power supply

Motor power	Power frequency	Nominal power supply current [A] depending on supply voltage [V]					
		220V	240V	400V	440V	208V	480V
1 x 0.9/1.3 KW	60 Hz	6.5 – 7.2 A	5.9 – 6.6 A	3.6 – 4.0 A	3.2 – 3.6 A	6.8 – 7.6 A	3.0 – 3.3 A
1 x 1.1/1.5 KW	60 Hz	7.1 – 7.9 A	6.6 – 7.3 A	3.9 – 4.4 A	3.6 – 4.0 A	7.6 – 8.4 A	3.3 – 3.6 A
1 x 1.15/1.6 KW	60 Hz	7.3 – 8.1 A	6.7 – 7.5 A	4.0 – 4.5 A	3.7 – 4.1 A	7.7 – 8.6 A	3.4 – 3.7 A
2 x 0.9/1.3 KW	60 Hz	12.9 – 14.4 A	11.9 – 13.2 A	7.1 – 7.9 A	6.5 – 7.2 A	13.7 – 15.2 A	5.9 – 6.6 A
2 x 1.1/1.5 KW	60 Hz	14.3 – 15.9 A	13.1 – 14.6 A	7.9 – 8.7 A	7.1 – 7.9 A	15.1 – 16.8 A	6.6 – 7.3 A
2 x 1.15/1.6 KW	60 Hz	14.6 – 17.9 A	13.4 – 16.4 A	8.0 – 9.8 A	7.3 – 8.9 A	15.5 – 18.9 A	6.7 – 8.2 A

Table 12: Nominal power supply current at the 60 Hz three-phase current supply

Power system nominal current values (A) for energy information (continued)

Rotomat with frequency converter

You can find an overview of the nominal power consumption of a Rotomat based on the motor power.

The nominal power supply current corresponds to the maximum current and flows only at a rated load.

Observe:

In the following table, the nominal power supply current specification is given based on the power supply voltage as a value range (from - to) for the corresponding carousel power and carousel type. The actual nominal power supply current at a rated load is specified on the carousel type plate.

The **motor power** required for this is specified in the order confirmation. (e.g.: with frequency converter soft start control, connection to 400 volts three-phase current, 2 x 1.1 KW, 50 Hz, 20% ED).

Connection to the 50 / 60 Hz AC mains

Motor power	Power frequency	Nominal power supply current [A] depending on supply voltage [V]				
		110V	120V	220V	230V	240V
1 x 1.1 KW	50/60 Hz	13.2 – 19.8 A	12.1 – 18.2 A	8.7 – 13.0 A	8.3 – 12.5 A	8.0 – 12.0 A
1 x 1.5 KW	50/60 Hz	17.6 – 24.5 A	16.2 – 22.5 A	11.6 – 16.1 A	11.1 – 15.4 A	10.6 – 14.8 A
2 x 1.1 KW	50/60 Hz	26.4 – 39.6 A	24.2 – 36.3 A	13.2 – 19.8 A	12.6 – 19.0 A	12.1 – 18.2 A

Table 13: Nominal power supply current at the 50/60 Hz three-phase current supply

Connection to the 50/60 Hz three-phase current supply

Motor power	Power frequency	Nominal power supply current [A] depending on supply voltage [V]							
		208V	220V	230V	240V	400V	415V	440V	480V
1 x 1.1 KW	50/60 Hz	5.3 – 7.4 A	5.0 – 7.0 A	4.8 – 6.7 A	4.6 – 6.4 A	2.8 – 4.6 A	2.7 – 4.4 A	2.5 – 4.2 A	2.3 – 3.8 A
1 x 1.5 KW	50/60 Hz	7.1 – 9.8 A	6.7 – 9.3 A	6.4 – 8.9 A	6.1 – 8.5 A	3.7 – 6.1 A	3.6 – 5.9 A	3.4 – 5.6 A	3.1 – 5.1 A
2 x 1.1 KW	50/60 Hz	10.6 – 14.7 A	10.0 – 13.9 A	9.6 – 13.3 A	9.2 – 12.8 A	5.5 – 8.6 A	5.3 – 8.3 A	5.0 – 7.8 A	4.6 – 7.2 A
2 x 1.5 KW	50/60 Hz	14.2 – 19.7 A	13.4 – 18.6 A	12.8 – 17.8 A	12.3 – 17.1 A	7.4 – 11.1 A	7.1 – 10.7 A	6.7 – 10.1 A	6.1 – 9.2 A

Table 14: Nominal power supply current at the 50/60 Hz three-phase current supply