

YASKAWA

LIFT INDUSTRY

Best in Class Products and Solutions



YASKAWA Solutions for the

YASKAWA offers solutions for numerous applications in the lift industry, from individual components for modernisation and new installations to ready-to-use package solutions.

The one stop shop for lift

YASKAWA offers bundles that perfectly match the chosen motor and lift application. Commissioning is as easy as possible. No matter what you need: Only one supplier, one order, one shipment, one guarantee.



Compatible

The L1000A Lift drive supports all common fieldbuses and standards.



Package for hydraulic lifts with the L1000H

An innovative solution for demanding hydraulic lift applications. The combination of an L1000H inverter drive and an EV4 valve from Blain Hydraulics ensures a smooth ride and extraordinary energy efficiency.

Lift Industry



Up to 2,500 kg at 2 m/s

The synchronous motors used in lift bundles are made in Europe and allow a comfortable ride in a wide range of lift installations. Thanks to PM Play the set up is easy and just a matter of minutes.

PM Play

The L1000A lift drive matches perfectly with the synchronous motors offered in the YASKAWA lift bundles. Just type in the motor code and all parameters are set instantly. Ready, steady, play.



Energy saving solutions

YASKAWA lift bundles consist of highly energy efficient components. Power regeneration with solutions like R1000, D1000 offer additional energy saving potentials for many lift applications. The U1000 matrix converter combines energy recovery, a clean grid and minimum space requirements.

L1000 lift drive series: Rise to the top

The YASKAWA L1000 series is the solution for technical requirements of today's elevators. This lift drive controls induction and permanent magnet motors. It is the first choice for new installation, machine room less lifts, but also for modernisation. Experience the proven YASKAWA reliability combined with a new level of ride comfort.



L1000V - compact and easy to use

The compact L1000V is a cost-effective solution for modernisation and new installation of lifts with gear motors that do not have speed feedback. By reducing its design to the essentials, this inverter drive combines user friendliness with stable lift performance and a durable, solid design.



L1000H - for modern hydraulic lift

With the L1000H inverter drive and the EV4 control valve from our partner Blain Hydraulics, YASKAWA is offering an energy-efficient solution for demanding hydraulic lift applications. Upward travel is controlled by the inverter and downward travel is controlled mechanically. Travel comfort in down direction can be optimized by the special down travel control sequence. Other than the connection of the magnetic coils, the controller works without pressure sensors or flowmeters.



L1000A - flexible and versatile

The L1000A lift drive controls induction and permanent magnet motors, and is a good choice for new installations and lift modernization. State-of-the-art control algorithms ensure a comfortable ride and precise positioning. It can completely replace motor contactors. Thus the L1000A reduces audible noise, costs, space requirements and maintenance effort.



Setup in shortest time

Setting up an elevator drive can be a real hassle, or it can be as easy as with L1000A. Motor data is automatically tuned in stand-still condition without the need to remove ropes, defaults are set to match the needs of most installations and parameters are shown in multi-language lift terminology and units.



Best ride comfort

The L1000A comes with a sophisticated vector control algorithm and lift dedicated control functions to realize a bump-free start also without load sensor, smooth speed transition and precise landing.



Brake monitoring

The L1000A is available with internal brake monitoring. This prevents unintended car movement without the need for additional external devices, reducing cost and maintenance effort.



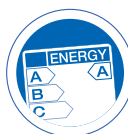
Rescue operation

In case of power outage L1000A can be supplied by batteries or an uninterruptable power supply (UPS). The drive can automatically evacuate to the light load direction allowing an optimal selection of the components used without any oversizing.



Operation without motor contactors

The L1000A can completely replace motor contactors. Thus it reduces audible noise, costs, space requirements and maintenance effort.



Low standby power consumption

The L1000A consumes very little energy, especially when not in operation. Thus making it easier to build lift systems which meet highest energy efficiency requirements.



Flexible controller interface

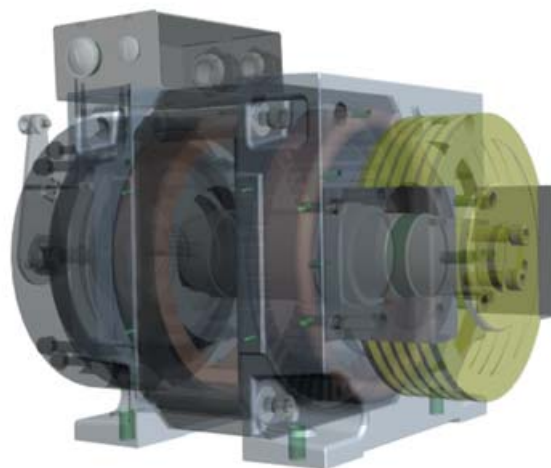
The L1000A provides digital and analog in- and outputs to connect to a lift controller but also supports DCP3, DCP4 and CANopen-Lift. The variety of interfaces allows an easy connection of the L1000A to almost any controller.

Lift motors for gearless elevators

Our gearless synchronous motors are manufactured in Europe and can be used in many different traction elevators designs. With a load capacity of up to 2,500 kg and its speed of 2 m/s they are ideally suited for a broad range of passenger elevators.



Design example



MSYP-160

This gearless synchronous motor can be used in many different traction elevators designs. With its load capacity of up to 1,250 kg and its speed of 2 m/s it is ideally suited for passenger elevators with medium sized cars.



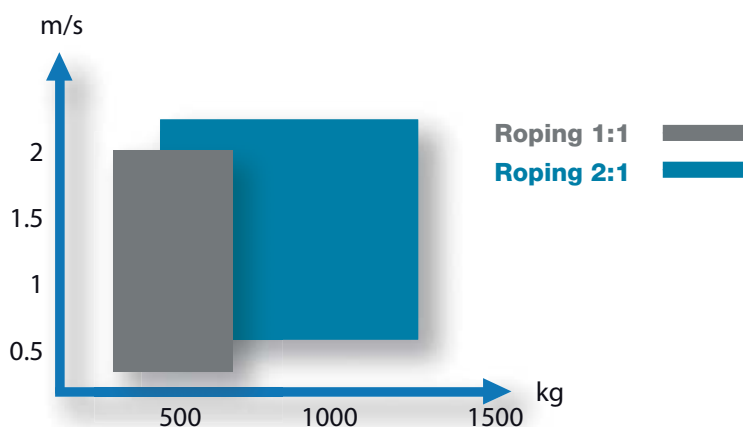
Low noise operation

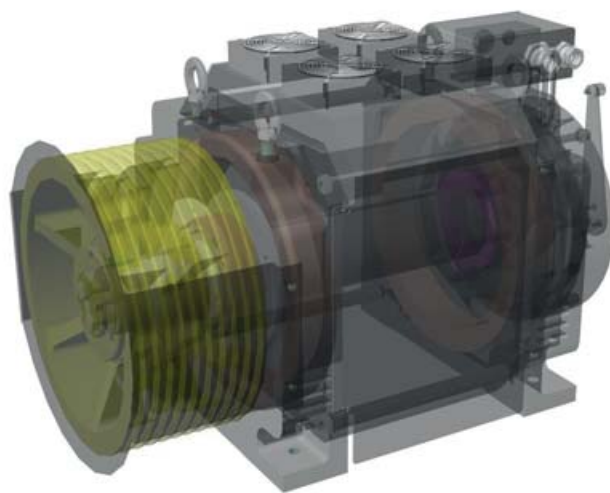
The MSYP Series lift motors are built for a comfortable ride. This includes a low noise level and minimized vibrations.



PM Play for setup in shortest time

Setting up an elevator drive can be a real hassle or it can be as easy as with PM Play. Just type in the motor serial number into your L1000A lift drive – and all motor related parameters are configured.





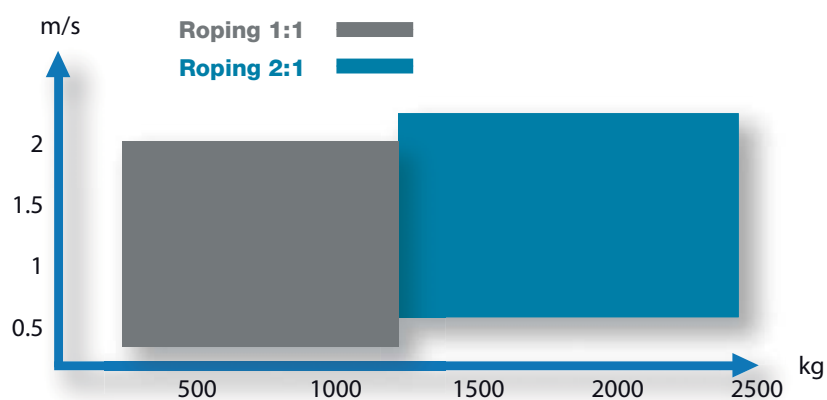
MSYP-225

This gearless, synchronous motor can be used in a diverse range of traction elevators designs. With its high load capacity of up to 2,500 kg and its speed of 2 m/s it is ideally suited for passenger elevators with spacious cars and for transport elevators in hospitals and nursing facilities.



Smooth ride characteristics

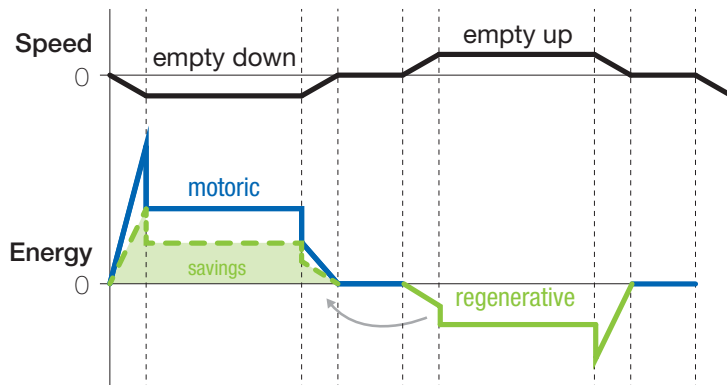
The perfect match with YASKAWA Lift drives enables a smooth ride and avoids any overshoot, even without a load sensor.



Power regenerative units

When it comes to highest demands in energy efficiency, there is no way around energy recovery. With our innovative green performance products we provide solutions for any lift applications, no matter if it's single or group lifts. Time to think green.

Energy saving potentials in elevators



Less energy consumption with power regeneration

- Braking energy regeneration - replaces braking resistors, saves space and reduces maintenance
- Consumers within the building use regenerative energy instead of line power
- Energy savings of up to 50% are possible, in addition less heat emission reduces the risk of fire



R1000

The R1000 regenerative braking unit is a smart and efficient alternative to dynamic braking for single or multi-axis drive installations with high amounts of regenerative motor operation. Instead of wasting it as heat, the R1000 feeds excessive braking energy back to the grid, thus reducing the energy consumption of the installation.



D1000

The D1000 regenerative converter unit complements the YASKAWA product range with a low harmonics Active Frontend Solution. Suitable for both regenerative individual drives and systems of inverter drives, servo axis or robots, the D1000 feeds excess braking energy back into the power grid instead of dissipating it as heat.



Energy efficient four-quadrant

R1000 saves energy by making excessive braking energy available to other consumers in the same grid instead of wasting it as heat. R1000 provides high duty cycle braking capability.



Smart system design

R1000 is purely selected by braking power and can therefore be selected smaller than the drive it is connected to. Thus it allows to minimize system space, optimize cost and maximize efficiency.



Save energy cost

Especially in high duty braking applications such as cranes, escalators or lifts the R1000 provides numerous advantages. The small installation space and low heat generation impact installation cost, while using the regenerated energy reduces the operating cost so that the R1000 pays back in a short period.



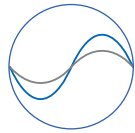
Cool operation

Power regenerative units eliminate the need for safely located braking resistors, thus saving valuable space and reducing the risk of fire. Less heat is generated so that the demand for ventilation is greatly reduced. Maintenance, e.g. for resistor cleaning, is not necessary.



Compatible

R1000 and D1000 regenerative units can be used with any conventional drive that has full access to the DC bus.



Clean power

U1000 and D1000 minimize losses in grid components like generators and transformers thanks to a sinusoidal input current with a total harmonic distortion of less than 5 % and a displacement power factor of ~ 1 . The higher power quality additionally reduces the potential disturbance of other components.



U1000

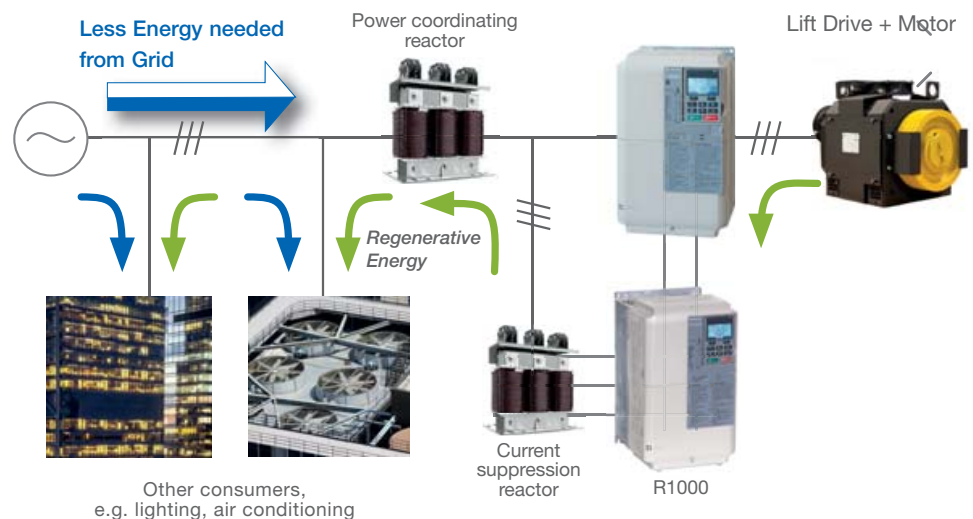
The U1000 is a highly efficient inverter drive based on latest Matrix converter technology. With full power regeneration capability it offers great energy saving potential while sinusoidal input currents and a power factor close to one reduce stress on grid components like transformers and power lines. With an ultra-compact shape the U1000 is the first choice for innovative, energy-efficient drive solutions with or without power regeneration.

Energy recovery and grid protection

With the R1000 regenerative braking unit, the D1000 regenerative converter unit and the U1000 matrix converter, YASKAWA provides solutions that help to significantly reduce energy consumption by feeding back braking energy to the power grid. This cuts down costs dramatically and allows a power-grid friendly operation.

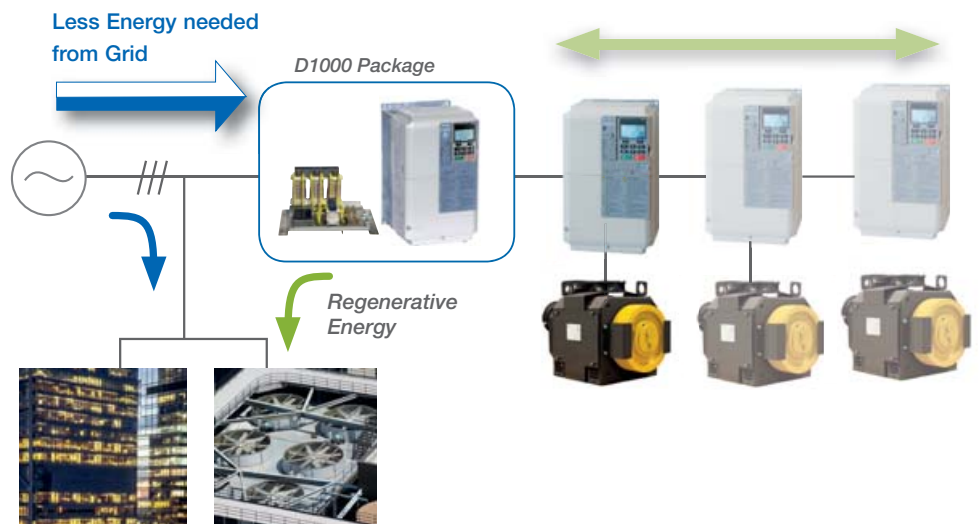
Option 1: R1000 Save energy with power regeneration

Unlike dynamic braking, which dissipates all braking energy in the form of heat, the R1000 avoids wasted energy by delivering it back to the power source for use by other loads.



Option 2: D1000 Save energy and protect the grid

The D1000 regenerative converter unit complements the YASKAWA product range with a low harmonics Active Frontend Solution. Suitable for both regenerative individual drives and systems of inverter drives, the D1000 feeds excess braking energy back into the power grid instead of dissipating it as heat. Typical one-on-one applications like escalators and elevators have one inverter drive connected to a D1000.





Option 3: U1000

Grid protection with built-in power regeneration

The U1000 has power regeneration built in. Braking energy that is typically wasted in resistors can be used by other consumers in the same grid, saving energy and cost. The all-integrated design of the U1000 reduces the required installation space for more than 50 %. Traditional regenerative and low harmonic solutions often use external transformers, reactors, and filter circuits. Not so the U1000. EMC and current filter components are built in and external components are not necessary.



Model	R1000	D1000	U1000
Energy saving by braking power regeneration	●	●	●
Motor drive	—	—	●
Improve power factor	—	●	●
Suppress input current harmonics	—	●	●
DC voltage boost	—	●	—
Multiple drives	—	●	—
Simple wiring	○	○	●
Downsize panel	○	○	●

Robots for welding, painting and handling

YASKAWA offers special welding robots, high quality positioners and gantry systems up to complete welding systems. In addition, the MOTOMAN robots from YASKAWA are also the optimum solution for handling and material feeding due to their speed, precision and cost-effectiveness.

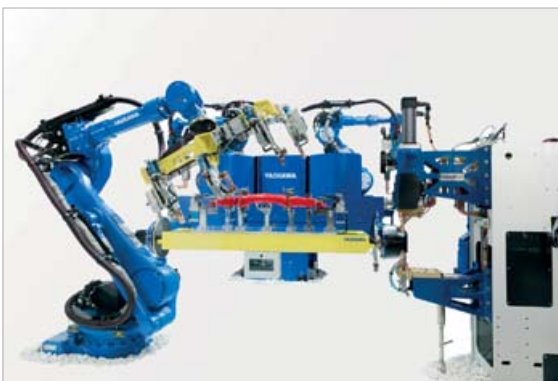
Turnkey welding systems

With more than 30 years of experience and a market share of over 30%*, YASKAWA is the No. 1 in automated path welding.

For the development and construction of systems, as well as robot programming, YASKAWA offers an all-round package according to customer requirements.

YASKAWA cooperates closely with almost all major welding technology suppliers for the automation sector. The devices and software are perfectly coordinated with the robots and represent state-of-the-art technology.

Even if there are only vague ideas about how to weld a workpiece, YASKAWA creates a concept for customers, integrates the necessary components and presents a solution that inspires.



Painting robots

Although a MOTOMAN robotic system is extremely fast, its high precision and well coordinated movements along the path save a considerable amount of time and reduce waste. The paint coating is applied consistently at maximum speed, with guaranteed perfect results.

The MOTOMAN EPX series offers a range of painting robots that are perfectly tailored to customer requirements and provide top quality results.



Material handling with robots

The MOTOMAN MH series offers flexible, 6-axis high-speed robots for a variety of applications such as handling, machine loading, processing and distribution applications.

* (Source: IFR numbers for 2016)



As demonstrated by numerous studies, up to 70% of the maintenance costs can be saved by preventive maintenance. A useful tool for this is the teleservice that enables a continuous monitoring and maintenance of the systems. For this reason with the VIPA teleservice modules we offer a modern and intelligent kind of teleservice for the different types of transmission.

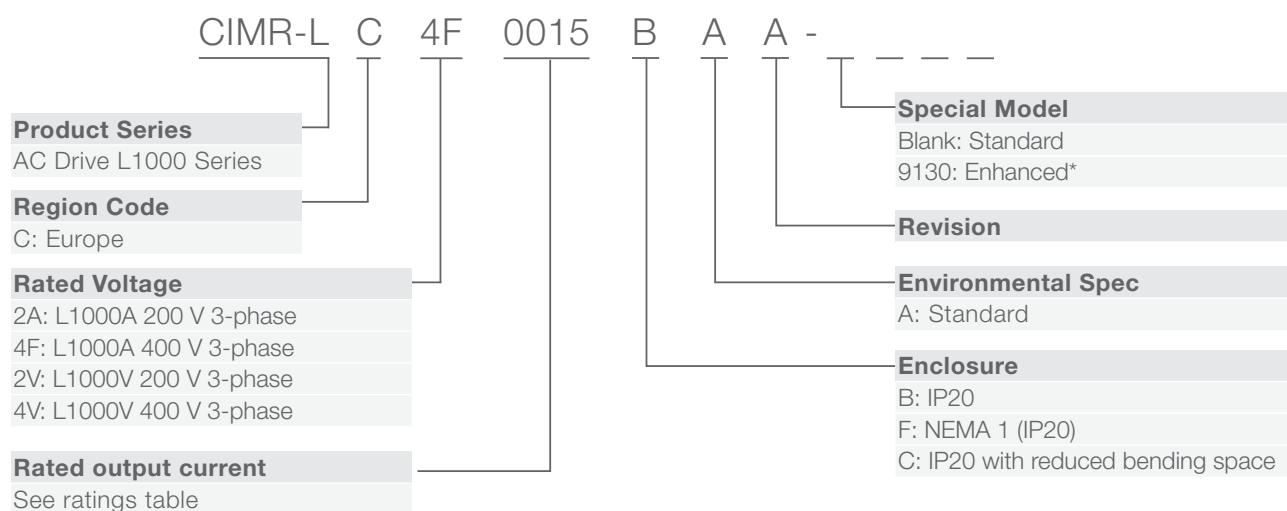
VIPA teleservice modules

Whether on the conventional way via analog or ISDN line or via broadband connections as ADSL and HSUPA (mobile communications) VIPA offers here the complete product range on teleservice modules too. The communication to your automatization modules is established by MPI or PROFIBUS or via the Ethernet interface, which belongs to each of our devices as standard. The configuration of the VIPA teleservice modules is performed via web browser. Additional software or the like is not required.



Technical data

Model designation L1000A & L1000V



*Enhanced: DCP3 & 4 interface, CANopen-Lift, Brake Monitoring for protection against unintended car movement, Advanced Light Load Search, Output Phase Loss Protection

Data and dimensions L1000A

200 - 240 VAC

L1000A drive CIMR- LC2A	Max. Appli- cable Motor Power [kW]	Rated Output Current * [A]	Dimensions [mm]			Weight [kg]	EMC Filter	AC Input Reactor	Braking Resistor
			H	W	D				
0008	1.5	8	260	140	147	3.2	FB-40014A	LR3 40-4/16	on request
0011	2.2	11	260	140	147	3.2	FB-40014A	LR3 40-4/16	on request
0018	4.0	18	260	140	164	3.5	FB-40025A	LR3 40-4/20	RH-1560W40
0025	5.5	25	260	140	167	4.0	FB-40044A	LR3 40-4/45	RH-1560W40
0033	7.5	33	260	140	167	4.0	FB-40044A	LR3 40-4/45	RH-2700W025
0047	11	47	300	180	187	5.6	FB-40060A	LR3 40-4/70	RH-2700W025
0060	15	60	350	220	197	8.7	FB-40072A	LR3 40-4/70	RH-3700W025
0075	18.5	75	365	220	197	9.7	FB-40105A	LR3 40-4/90	on request
0085	22	85	534	254	258	23	FB-40105A	LR3 40-4/115	on request
0115	30	115	614	279	258	28	FB-40170A	LR3 40-4/115	on request
0145	37	145	630	329	283	40	FB-40170A	LR3 40-4/160	on request
0180	45	180	630	329	283	40	FB-40170A	LR3 40-4/200	on request
0215	55	215	705	450	330	81	FB-40250A	LR3 40-4/250	on request
0283	75	283	705	450	330	86	FB-40250A	LR3 40-4/250	on request
0346	90	346	800	500	350	105	FB-40414A	LR3 40-4/400	on request
0415	110	415	800	500	350	105	FB-40414A	LR3 40-4/400	on request

*The value of output current for models up to 115 A assumes a maximum carrier frequency of 8 kHz and a maximum carrier frequency of 5 kHz for 145 A and above. Increasing the carrier frequency requires a reduction in current.

Data and dimensions L1000A and L1000H (L1000A based models)

380 - 480 VAC (SIL 3 STO built-in)

CIMR-LC4F □□□□	Max. Ap- plicable Motor Power [kW]	Rated Output Current* [A]	Dimensions [mm]			Weight [kg]	EMC Filter (L1000A)	EMC Filter (L1000H)	AC Input Reactor	Braking Resistor (only for L1000A)
			H	W	D					
0005	1.5	4.8	260	140	147	3.2	FB-40008A	FS5972-18-07	B1103136	RH-1000W120
0006	2.2	5.5	260	140	164	3.4	FB-40014A	FS5972-18-07	B1103136	RH-1000W120
0009	4.0	9.2	260	140	164	3.5	FB-40014A	FS5972-18-07	B1103136	RH-1000W120
0015	5.5	14.8	260	140	167	3.9	FB-40025A	FS5972-35-07	B1103138	RH-1000W120
0018	7.5	18	260	140	167	3.9	FB-40025A	FS5972-35-07	B1103138	RH-1560W040
0024	11	24	300	180	167	5.4	FB-40044A	FS5972-35-07	B1103139	RH-2700W025
0031	15	31	300	180	187	5.7	FB-40044A	FS5972-60-07	B1103140	RH-3700W025
0039	18.5	39	350	220	197	8.3	FB-40060A	FS5972-60-07	B1103141	RH-4800W022
0045	22	45	465	254	258	23	FB-40060A	FS5972-60-07	B1103141	RH-6000W022
0060	30	60	515	279	258	27	FB-40072A	FS5972-100-35	B1103142	RH-7500W023
0075	37	75	630	329	258	39	FB-40105A	FS5972-100-35	B1103142	CDBR 4045B + RH9600W015
0091	45	91	630	329	258	39	FB-40105A	FS5972-170-35	B0910013	CDBR 4045B + RH9600W015
0112	55	112	730	329	283	43	FB-40170A	FS5972-170-35	B0910013	2× (CDBR 4030B + RH6000W22)
0150	75	150	730	329	283	45	FB-40170A	FS5972-170-35	B1411053	2× (CDBR 4045B + RH9600W15)
0180	90	180	705	450	330	85	FB-40250A	-	B1411053	2× (CDBR 4045B + RH9600W15)
0216	110	216	800	500	350	103	FB-40250A	-	2× B0910013	3× (CDBR 4045B + RH9600W15)

*The value of output current for models up to 115 A assumes a maximum carrier frequency of 8 kHz and a maximum carrier frequency of 5 kHz for 145 and above. Increasing the carrier frequency requires a reduction in current. L1000H models are available only up to 150 A.

EMC Filter & AC Input Reactor

EMC filters and AC reactors are installed at the input of the drive. They reduce conducted emission and harmonic distortion in order to maintain compliance with EMC standards such as the EN12015.



Braking Options

Braking options dissipate kinetic energy when moving in regenerative direction. Drives up to 30 kW have built-in braking transistors and must only be equipped with a braking resistor. Larger drives need an additional braking unit.



Technical data

Data and dimensions L1000V

200 - 240 VAC

CIMR-LC2V □□□□	Max. Applicable Motor Power [kW]	Rated Output Current * [A]	Dimensions [mm]			Weight [kg]	EMC Filter	AC Input Reactor (IP 20 Cover available)	Braking Resistor
			H	W	D				
0018	4.0	18	153	140	143	2.6	FS23637-24-07	LR3 40-4/20	RH-1560W040
0025	5.5	25	254	140	140	3.8	FS23637-52-07	LR3 40-4/45	RH-1560W040
0033	7.5	33	254	140	140	3.8	FS23637-52-07	LR3 40-4/45	RH-2700W025
0047	11.0	47	290	180	163	5.5	FS23637-68-07	LR3 40-4/70	RH-3700W025
0060	15.0	60	350	220	187	9.2	FS23637-80-07	LR3 40-4/70	RH-3700W025

Data and dimensions L1000V and L1000H (v1000 based models)

380 - 480 VAC

CIMR-LC4V □□□□	Max. Applicable Motor Power [kW]	Rated Output Current * [A]	Dimensions [mm]			Weight [kg]	EMC Filter	AC Input Reactor (IP 20 Cover available)	Braking Resistor (only for L1000V)
			H	W	D				
0007 (L1000H)	3.0	7.2	128	108	154	1.7	FS23639-10-07	B 0903084	-
0009	4.0	9.2	128	140	143	2.4	FS23639-15-07	B0903084	RH-1000W120
0015	5.5	14.8	254	140	140	3.8	FS23639-30-07	B0903085	RH-1000W120
0018	7.5	18.0	254	140	140	3.8	FS23639-30-07	B0903085	RH-1560W040
0024	11.0	24.0	290	180	143	5.2	FS23639-50-07	B0903086	RH-2700W025
0031	15.0	31.0	290	180	163	5.5	FS23639-50-07	B0903087	RH-3700W025

*: This value assumes a maximum carrier frequency of 8 kHz. Increasing the carrier frequency requires a reduction in current.

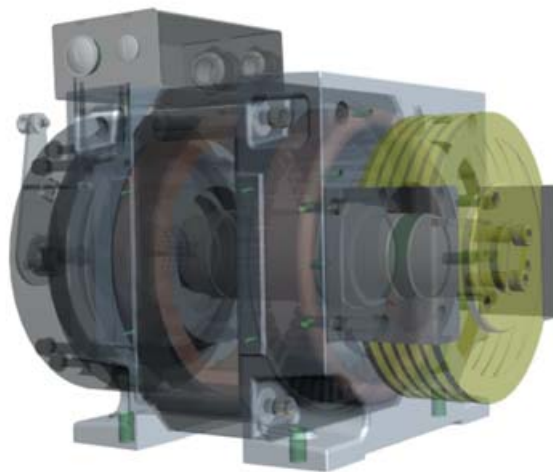
Specifications / Options

Operating Environment	
Ambient temperature	-10 to +50 °C
Storage temperature	-20 to +60 °C
Humidity	95 % RH or less (non-condensing)
Altitude	Up to 1000 meters (output current derating of 1% per 100 m required above 1000 m, max. 3000 m)
Vibration/Shock	10 Hz to 20 Hz, 9.8 m/s ² max. 20 Hz to 55 Hz, 5.9 m/s ² (200 V: 45 kW or more, 400 V: 55 kW or more) or 2.0 m/s ² max. (200 V: 55 kW or less, 400 V: 75 kW or less)
Protection design	IP20 Open Type enclosure

	L1000A and L1000H (L1000A based)	L1000V	L1000H (V1000 based)
Conformity / Standards			
Standards	CE, UL, cUL, RoHS	CE, UL, cUL	CE, UL, cUL
Functional safety	LC2A: STO (Safe Torque Off), Cat. 3, PL d; SiL2 LC4F: STO (Safe Torque Off), Cat. 3, PL e; SiL3	STO (Safe Torque Off), Cat. 3, PL d; SiL2	STO (Safe Torque Off), Cat. 3, PL d; SiL2
Power Ratings			
Max. motor output	1.5 - 110 kW	4.0 - 15.0 kW	3.0 - 15.0 kW
Overload capacity	150% for 1 minute		
Rated voltage	200 V Class: 200 to 240 V 50/60 Hz (-15% to +10%) 400 V Class: 380 to 480 V 50/60 Hz (-15% to +10%)		
Rated input frequency	50/60 Hz ± 3%		
Max. output frequency	200 Hz	120 Hz	200 Hz
Braking transistors	Built-in up to 30 kW	Built-in	Built-in
Control / Programming			
Control inputs	8 digital (sink/source), 2 analog (voltage)	7 digital (sink/source), 1 pulse	6 digital (sink/source), 2 analog (current/voltage)
Control outputs	4 digital relay, 2 photocoupler, 2 analog (voltage)	2 digital relay, 1 photocoupler, 1 analog (current/voltage)	1 digital relay, 1 photocoupler, 1 analog (voltage), 1 pulse train
Operator	LCD with copy function for several parameter	LED, LCD optional	LED, LCD optional

Options for L1000A		
Communication	CANopen-Lift(only for LC4F models)	SI-L3
Motor feedback	Incremental Encoder (Line Driver)	PG-X3
	Complimentary Encoder (HTL, Open-Collector)	PG-B3
	Resolver Interface for TS2640N321E64	PG-RT3
	Endat 2.1/2.2, HIPERFACE	PG-F3
	Heidenhain ERN1387 / ERN487	PG-E3
Input/Output	Analog Output: 2-channel, -/+10 V (11-bit signed)	AO-A3
	Digital Input: 16 Digital inputs, +24 V, at 8 mA each, sink or source, multi-function or frequency reference (16-bit binary or BCD)	DI-A3
	Digital Output: 6 photocoupler (48 V, 50 mA), 2 relay contacts (250 VAC/30 VDC, 1 A max.)	DO-A3

MSYP-160 technical data



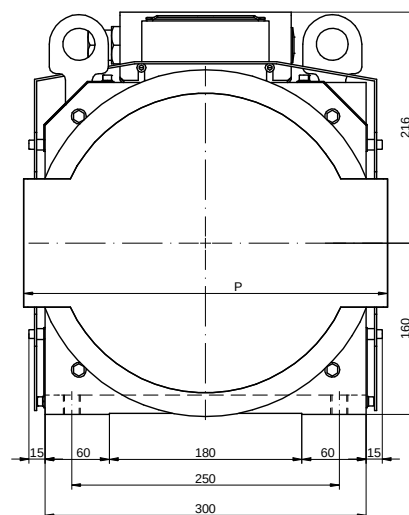
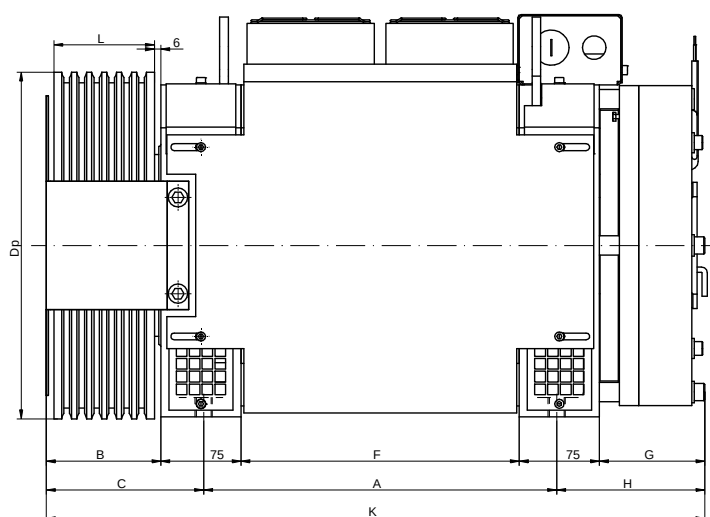
Performance data (more models available)
Roping 2:1

Motor Type	ID Number	Rated Output [kW]	Load Q [kg]	Traction Sheave [mm]	Grooves Rope Ø [mm]	R/min at 1 m/s
MSYP-160.20-20	320160	2.0	320	240	5 × 6.5	160
MSYP-160.20-20	320255	3.1	320	240	5 × 6.5	255
MSYP-160.30-20	630160	3.9	630	240	7 × 6.5	160
MSYP-160.40-20	630120	3.9	630	320	6 × 8.0	120
MSYP-160.30-20	630255	6.2	630	240	7 × 6.5	255
MSYP-160.40-20	630191	6.2	630	320	6 × 8.0	191
MSYP-160.50-20	100160	6.1	1000	240	10 × 6.5	160
MSYP-160.60-20	100120	6.1	1000	320	6 × 8.0	120
MSYP-160.50-20	100255	9.8	1000	240	10 × 6.5	255
MSYP-160.60-20	100191	9.8	1000	320	6 × 8.0	191

Roping 1:1

Motor Type	ID Number	Rated Output [kW]	Load Q [kg]	Traction Sheave [mm]	Grooves Rope Ø [mm]	R/min at 1 m/s
MSYP-160.30-20	320080	2.0	320	240	7 × 6.5	80
MSYP-160.40-20	320060	2.0	320	320	6 × 8.0	60
MSYP-160.30-20	320128	3.1	320	240	7 × 6.5	128
MSYP-160.40-20	320096	3.1	320	320	6 × 8.0	96
MSYP-160.50-20	480080	3.0	480	240	10 × 6.5	80
MSYP-160.60-20	480060	3.0	480	320	6 × 8.0	60
MSYP-160.50-20	480128	4.7	480	240	10 × 6.5	128
MSYP-160.60-20	480096	4.7	480	320	6 × 8.0	96
MSYP-160.60-20	630080	3.9	630	240	10 × 6.5	80
MSYP-160.60-20	630128	6.2	630	240	10 × 6.5	128

Additional versions upon request. Max. Axle load: 3,100 kg. Weight counter-balance at travel heights > 40 m



Dimensions

Motor Type	Dimensions [mm]									
	A	B	C	F	G	H	Dp	L	P	K
MSYP-160.20-20	180	83	123	110	99	139	240	70	251.51	442
MSYP-160.30-20	230	120	160	160	99	139	240	94	254	529
							320		340	
MSYP-160.40-20	280	120	160	210	99	139	240	94	254	579
							320		340	
MSYP-160.50-20	330	150	190	260	108	148	240	130	254	668
		119	159				320	94	340	637
MSYP-160.60-20	380	150	190	310	108	148	240	130	254	718
		119	159				320	94	340	687

MSYP-225 technical data

Performance data (more models available)

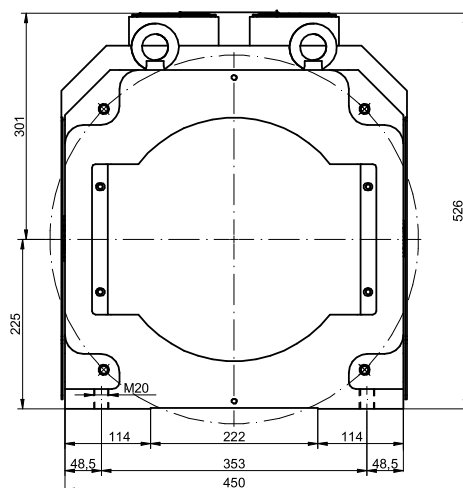
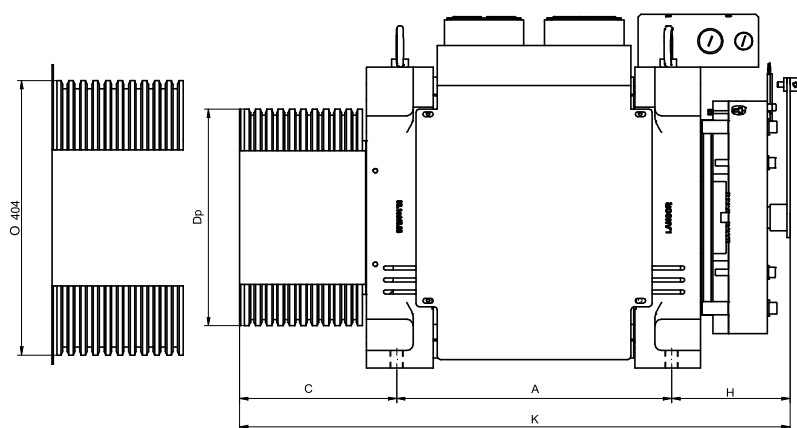
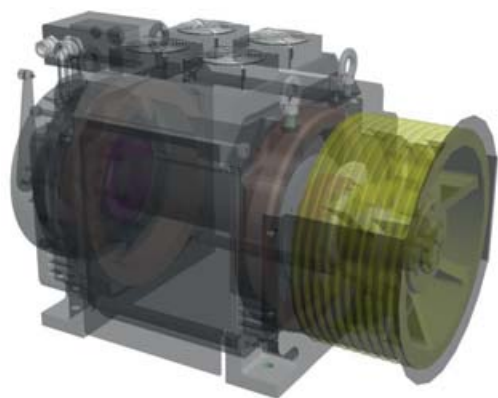
Roping 2:1

Motor Type	ID Number	Rated Output [kW]	Load Q [kg]	Traction Sheave [mm]	Grooves Rope Ø [mm]	R/min at m/s	
MSYP-225.44-20	125120	8.8	1250	320	10 × 8	120	1.0
MSYP-225.44-20	125191	14.0	1250	320	10 × 8	191	1.6
MSYP-225.44-20	160120	11.2	1600	320	10 × 8	120	1.0
MSYP-225.52-20	160096	11.2	1600	400	10 × 10	96	1.0
MSYP-225.52-20	160191	18.0	1600	320	10 × 8	191	1.6
MSYP-225.60-20	160153	17.9	1600	400	10 × 10	153	1.6
MSYP-225.52-20	200120	14.0	2000	320	10 × 8	120	1.0
MSYP-225.60-20	200191	22.4	2000	320	10 × 8	191	1.6
MSYP-225.64-20	200096	14.0	2000	400	10 × 10	96	1.0
MSYP-225.72-20	200153	22.4	2000	400	10 × 10	153	1.6
MSYP-225.64-20	250120	17.5	2500	320	10 × 8	120	1.0
MSYP-225.72-20	250191	28.0	2500	320	10 × 8	191	1.6

Roping 1:1

Motor Type	ID Number	Rated Output [kW]	Load Q [kg]	Traction Sheave [mm]	Grooves Rope Ø [mm]	R/min at m/s	
MSYP-225.28-20	630060	4.4	630	320	10 × 8	60	1.0
MSYP-225.44-20	630095	7.1	630	320	10 × 8	95	1.6
MSYP-225.44-20	800060	5.6	800	320	10 × 8	60	1.0
MSYP-225.44-20	800095	9.0	800	320	10 × 8	95	1.6
MSYP-225.52-20	800048	5.6	800	400	10 × 10	48	1.0
MSYP-225.60-20	800076	9.0	800	400	10 × 10	76	1.6
MSYP-225.52-20	100060	7.0	1000	320	10 × 8	60	1.0
MSYP-225.60-20	100048	7.0	1000	400	10 × 10	48	1.0
MSYP-225.60-20	100095	11.3	1000	320	10 × 8	95	1.6
MSYP-225.68-20	100076	11.3	1000	400	10 × 10	76	1.6
MSYP-225.60-20	125060	9.0	1250	320	10 × 8	60	1.0
MSYP-225.72-20	125095	14.1	1250	320	10 × 8	95	1.6

Additional versions upon request. Max. Axle load: 10,050 kg. Standard sheave has 10 grooves.
Weight counter-balance at travel heights > 40 m.

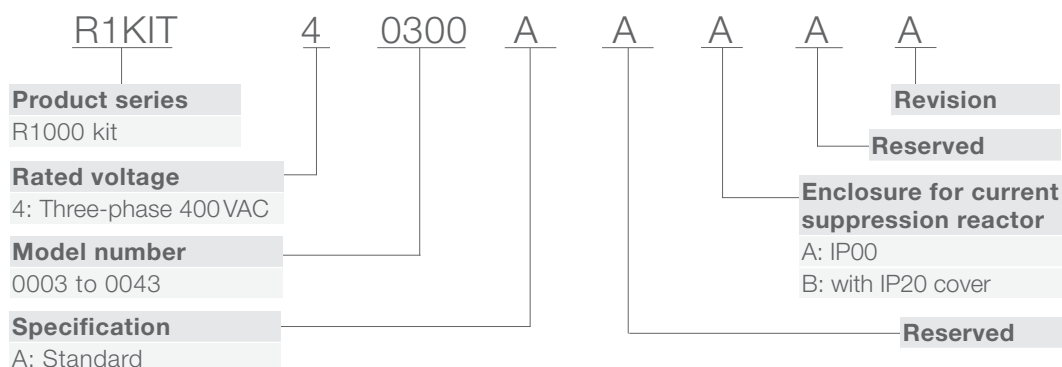


Dimensions

Motor Type	Dimensions [mm]				
	A	C	H	Dp	K
MSYP-225.28-20	251.5	235	177	324	663.5
		244		404	673.0
MSYP-225.44-20	331.5	235	177	324	743.5
		244		404	
MSYP-225.52-20	371.5	235	177	324	783.5
		244		404	
MSYP-225.60-20	411.5	235	177	324	823.5
		244		404	
MSYP-225.72-20	471.5	235	184	324	890.5
		244		404	

R1000 technical data

Model designation



Package selection

- Select a kit using the maximum regenerative (braking) power.
Select an R1000 kit with a power rating higher than the calculated braking power, keeping in mind the R1000 duty cycle and overload capability (150 % for 30 seconds).
- If the braking power is unknown select a kit using the motor/drive capacity.
- Select a power coordinating reactor and EMC filter according to the drive used.

R1KIT4 □□□□AA□A	Ratings [kW]	
	Max. re-generative power [kW]	Motor/ Drive capacity [kW]
0003	3.5	4.0 or less
0005	5	5.5
0007	7	7.5
0010	10	11
0014	14	15
0017	17	18.5
0020	20	22
0028	28	30
0035	35	37
0043	43	45

Power coordinating reactor for L1000A/L1000V lift inverter for EN12015 conformity (IP20 cover as option)

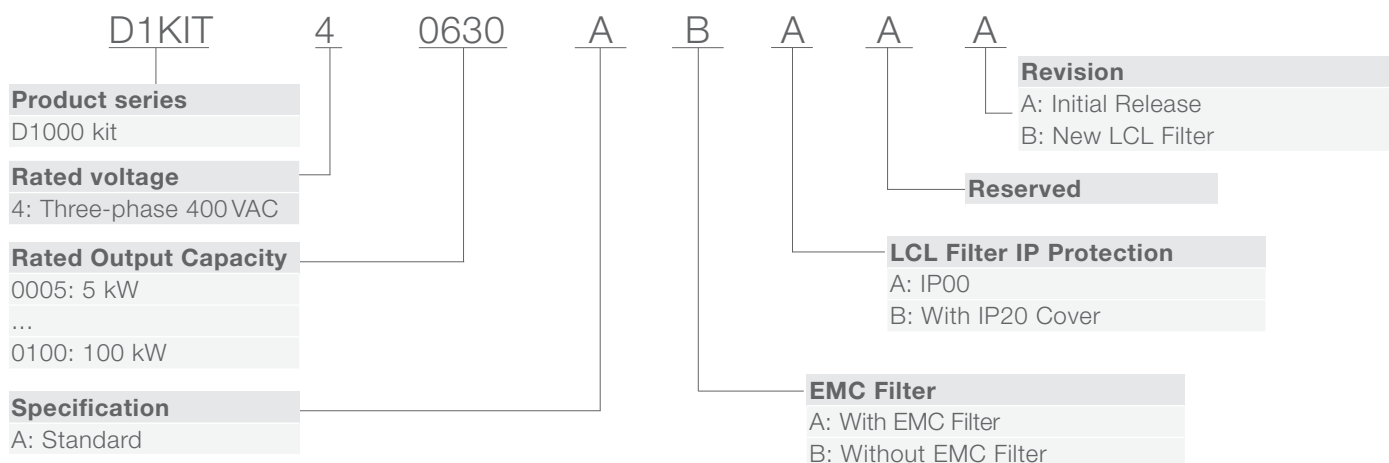
L1000A drive CIMR-LC4F	L1000V drive CIMR-LC4V	Power coordinating reactor	Dimensions [mm]			Weight [kg]
			H	W	D	
0005	0009	B 1103136	110	155	170	6.0
0006	0015	B 1103136	110	155	170	6.0
0009	0018	B 1103136	110	155	170	6.0
0015	0024	B 1103138	102	185	196	7.7
0018	0031	B 1103138	102	185	196	7.7
0024		B 1103139	125	210	220	9.6
0031		B 1103140	135	210	220	10.7
0039		B 1103141	166	230	205	12.5
0045		B 1103141	166	230	205	12.5
0060		B 1103142	166	263	205	25.0
0075		B 1103142	166	263	205	25.0
0091		B 0910013	180	330	270	36.4

400 V models from 3.5 kW to 43 kW regenerative power

	Part number	Dimensions [mm]			Weight
		H	W	D	[kg]
R1KIT40003AA□AA					
R1000 unit	CIMR-RC4A03P5FAA	260	140	167	4.0
Current suppression reactor	B1509105	102	78	63	0.85
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40005AA□AA					
R1000 unit	CIMR-RC4A0005FAA	260	140	167	4.0
Current suppression reactor	B1509105	102	78	63	0.85
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40007AA□AA					
R1000 unit	CIMR-RC4A0007FAA	260	140	167	4.0
Current suppression reactor	B1509106	118	96	60	1.31
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40010AA□AA					
R1000 unit	CIMR-RC4A0010FAA	300	180	187	5.0
Current suppression reactor	B1509107	118	98	60	1.32
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40014AA□AA					
R1000 unit	CIMR-RC4A0014FAA	300	180	187	5.0
Current suppression reactor	B1509108	150	120	90	1.9
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40017AA□AA					
R1000 unit	CIMR-RC4A0017FAA	365	220	197	8.0
Current suppression reactor	B1509108	150	120	90	1.9
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40020AA□AA					
R1000 unit	CIMR-RC4A0020FAA	365	220	197	8.0
Current suppression reactor	B1509109	150	120	90	1.93
Optional cover	IP20-Box31	130	170	170	0.9
R1KIT40028AA□AA					
R1000 unit	CIMR-RC4A0028FAA	365	220	197	8.0
Current suppression reactor	B1509110	195	155	102	3.8
Optional cover	IP20-Box32	155	190	220	1.25
R1KIT40035AA□AA					
R1000 unit	CIMR-RC4A0035AAA	450	275	258	20
Current suppression reactor	B1504118	175	155	95	4.0
Optional over	IP20-Box32	155	190	220	1.25
R1KIT40043AA□AA					
R1000 unit	CIMR-RC4A0043AAA	450	275	258	20
Current suppression reactor	B1509111	195	155	102	4.43
Optional over	IP20-Box32	155	190	220	1.25

D1000 technical data

Model designation



D1000 package content

- D1000 Regenerative Converter Unit
- EMC Filter (optional)
- Input Reactor(s)
- Harmonic Filter Module or Harmonic Filter Kit

D1KIT... A□□AB	Ratings [kW]		
	Output capacity	Motor capacity	Drive capacity
40005	5	3.7	≤ 4.0
40010	10	5.5	7.5
40020	20	11	15
40030	30	18.5	22
40040	40	30	30
40060	60	37	45
40100	100	55	75



D1000
Regenerative Converter Unit



IP20 Cover



Filter Kit



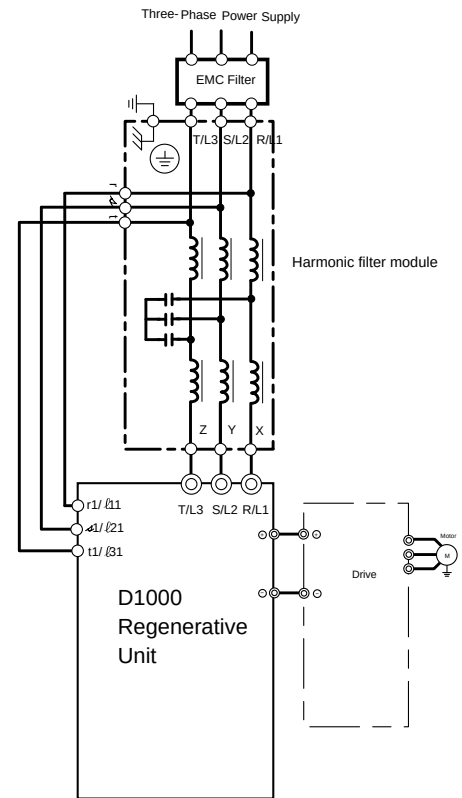
EMC Filter

Specifications / Options

400 V Models from 5 kW to 40 kW

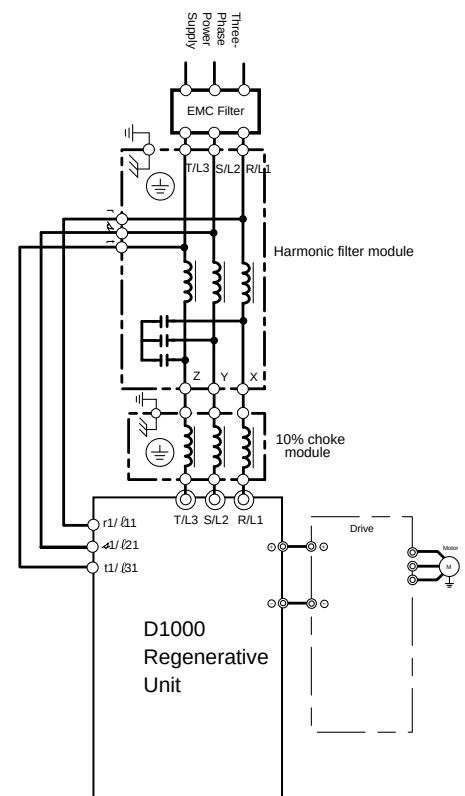
	Part number	Dimensions [mm]			Weight	
		H	W	D	[kg]	
D1KIT40005A□□AB						
D1000 unit	CIMR-DC4A0005BAA	300	180	187	5.0	
LCL filter module*	B84143G0008R176	176	386	200	9.0	
optional IP20 cover	B84143Q0008R176	202	386	200	1.5	
optional EMC filter	B84143A0020R106	57.5	150	58	0.6	
D1KIT40010A□□AB						
D1000 unit	CIMR-DC4A0010BAA	300	180	187	5.0	
LCL filter module*	B84143G0016R176	234	386	320	18	
optional IP20 cover	B84143Q0016R176	202	386	200	1.5	
optional EMC filter	B84143A0020R106	57.5	150	58	0.6	
D1KIT40020A□□AB						
D1000 unit	CIMR-DC4A0020BAA	365	220	197	8	
LCL filter module*	B84143G0030R176	236	426	320	28	
optional IP20 cover	B84143Q0016R176	322	426	250	2.5	
optional EMC filter	B84143A0035R106	72.5	160	71	0.9	
D1KIT40030A□□AB						
D1000 unit	CIMR-DC4A0030AAA	450	275	258	21	
LCL filter module*	B84143G0043R176	286	426	430	37	
optional IP20 cover	B84143Q0043R176	432	436	310	3.7	
optional EMC filter	B84143A0065R106	84.5	217	80	1.9	
D1KIT40040A□□AB						
D1000 unit	CIMR-DC4A0040AAA	450	275	258	21	
LCL filter module*	B84143G0058R176	286	436	430	64	
optional IP20 cover	B84143Q0043R176	432	436	310	3.7	
optional EMC filter	B84143A0065R106	84.5	217	80	1.9	

*Contains harmonic filter and reactor



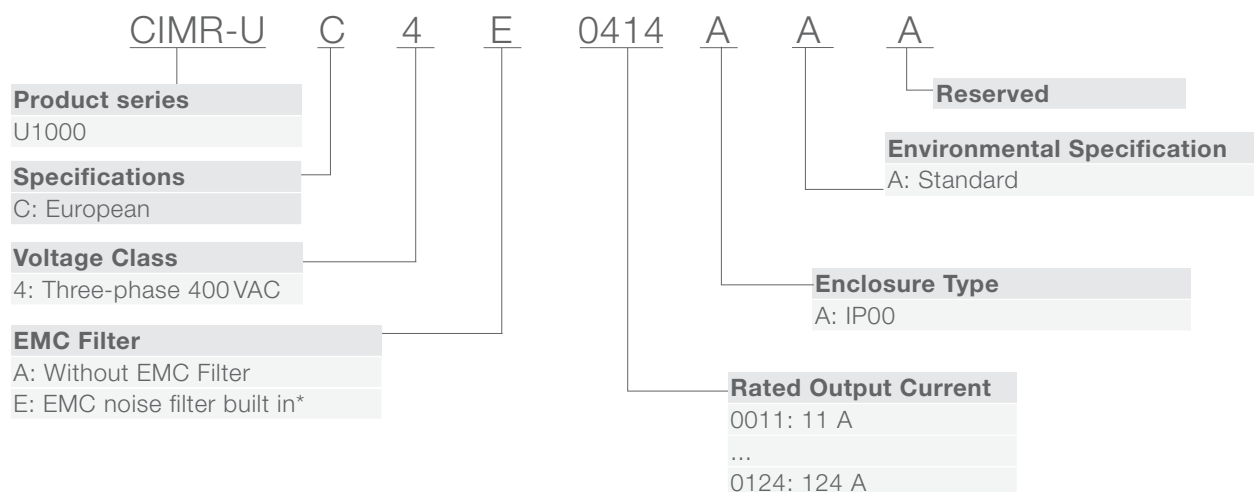
400 V Models from 60 kW to 100 kW

	Part number	Dimensions [mm]			Weight	
		H	W	D	[kg]	
D1KIT40060A□AAB						
D1000 unit	CIMR-DC4A0060BAA	550	325	283	34	
Harmonic filter	B84143G0008R176	288	265	240	20	
10 % choke module		390	187	300	55	
optional EMC filter	B84143B0180S080	170	200	110	5.0	
D1KIT40100A□AAB						
D1000 unit	CIMR-DC4A0100BAA	550	325	283	36	
Harmonic filter	B84143G0016R176	303	328	240	30	
10 % choke module		405	390	365	69	
optional EMC filter	B84143B0180S080	170	200	110	5.0	



U1000 technical data

Model designation



* up to 414A, bigger models need external EMC filters



CIMR-UC4 □□□□AAA	Ratings		
	Output current [A]	max. Motor capacity [kW]	?
0011	11	4.0	
0014	14	4.0	
0021	21	7.5	
0027	27	11	
0034	34	15	
0040	40	18.5	
0052	52	22	
0065	65	30	
0077	77	37	
0096	96	45	
0124	124	55	

Specifications / Options

400 V Models up to 124 A rated current

CIMR-UC4 □□□□AAA	Dimensions [mm]			Weight with integrated EMC filter [kg]		Weight [kg] Standard model	
	H	W	D	IP00	IP20	IP00	IP20
0011	480	250	360	21	22.5	20	21.5
0014	480	250	360	21	22.5	20	21.5
0021	480	250	360	21	22.5	20	21.5
0027	480	250	360	21	22.5	20	21.5
0034	480	250	360	21	22.5	20	21.5
0040	650	264	420	33	35	32	34
0052	650	264	420	33	35	32	34
0065	650	264	420	36	38	35	37
0077	650	264	420	36	38	35	37
0096	816	264	450	63	65	60	62
0124	816	264	450	63	65	60	62

Input / Output

Inputs	8 digital, 3 analog (current/voltage), 1 pulse
Outputs	4 relays, 2 analog (current/voltage), 1 pulse

Communication Options

- ▶ RS-422/485 (MEMOBUS/Modbus at 115.2 kbps)
standard on all models
- ▶ Option cards available for all major fieldbuses

PROFI
NET

CC-Link

EtherCAT

MECHATROLINK

ETHERNET
POWERLINK

DeviceNet

PROFI
BUS

Modbus / TCP

CANopen

EtherNet/IP



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