

## Not small – simply the perfect design

The compact extra-low voltage drives with an expanded range of gear units





### Logistics is changing – but we remain your reliable partner

#### Demands in the industrial and consumer sectors are changing.

Orders are having to be fulfilled faster and container sizes are getting ever smaller.

Stationary materials handling technology

At the same time, factory logistics is continuously becoming more flexible, with conveyor modules getting smaller and increasingly being designed as mobile units. Shuttle vehicles are taking over from rigid systems in certain areas - logistics is changing.

### Perfectly designed for your application

If demands in logistics are changing, the solutions used need to adapt to these changes. So if conveyor lines are getting more compact, flexible, and - in some cases - more mobile, then this is also reflected in the drives. With our compact extra-low voltage drives, we offer you a solution that is perfect for the changing demands in stationary and

mobile warehousing systems. If your demands should go beyond the performance range of our new extra-low voltage drives, our extensive modular system of gearmotors offers a wide variety of solutions - from small to very large, and even over 500 kNm.



Lifting modules and corner transfer units

In logistics operations, goods aren't always being moved just in a straight line or on one level. That's why our compact extra-low voltage drives are also able to convey loads dynamically around corners or drive lifting modules.



#### **Belt and chain conveyors**

Our new compact extra-low voltage drives are also tailored to the demands of continuous duty. Regardless of whether you are moving individual unit loads or light bulk goods, our new drives can handle loads of up to 50 kg.

#### Shuttle travel drives and load handling devices - typical applications for which our new compact extra-low voltage drives are perfectly designed

If your logistics is becoming more mobile and even more flexible and shuttles are becoming a more common sight, then our new compact extra-low voltage drives are perfect for moving the shuttles or load handling devices. Thanks to their compact design, they can be integrated into almost any application. They can be used, for example, as simple shuttle travel drives and mobile load handling devices, on automated warehouse systems (storage/retrieval systems, automatic small parts warehouses), in sorters with a belt or tray, pallet transfer shuttles, or automated guided vehicle systems.





Linear conveyors and accumulating roller conveyors

These are becoming ever faster and lighter. However, there must also be a flexible mechanism for bringing unit loads to a controlled stop - and this is an optimum environment for our new compact extra-low voltage drives.



**Pushers and format adjustment** 

Do your belts have to handle goods with varying dimensions? No problem! Our new compact extra-low voltage drives with overload capacity also move pushers and format adjusters reliably for the long term.



#### **Rotary units and rotary tables**

If your conveyor systems cross each other or if you need to feed goods in and out, our compact extra-low voltage drives also offer efficient, perfectly designed assistance for turning devices.

### **Our solutions**



#### Compact motor of the DCA.. series

- Efficient, because they are electronically commutated internal rotor motors with a high power density
- Compact, because the drives are equipped with fully integrated control electronics with an analog and digital interface
- Simple, because they can be parameterized via an RS485 engineering interface
- Flexible, because they can be adjusted to various applications
- Reliable connections, because all required electrical contacts can be made using a hybrid plug connector



### Compact planetary gearmotor of the PN..DCA.. series

- Able to cope with overloads, because the gear unit has been designed for high peak loads
- Smooth running, because an optimized gear wheel geometry has been used in a compact design
- Customized, because of multiple motor and gear unit combinations with a variety of reduction ratios in the first and second stage
- Flexible, because there is no offset and the symmetrical design supports many installation positions



### Compact right-angle gearmotor of the KN..DCA.. series

- Compact, because they combine right-angle and planetary stages in one housing
- Able to cope with overloads, because the planetary output stages consist of 5 straight-toothed planet gears made of hardened sintered steel
- Powerful, because a helical planetary stage is integrated upstream of the right-angle stage, which itself has been designed to provide optimum conditions for the engaging gears
- A perfect fit, because their compact design means the drives can be used even in applications with the smallest of installation spaces
- Smooth running, because the high level of efficiency ensures there is no self-locking effect







#### Compact right-angle gearmotor of the W..DCA.. series

- Versatile, because of hollow shaft or solid shaft design variants
- Versatile, because of 2 sizes with 5 gear ratios each
- Cost-effective, due to tried-and-tested SPIROPLAN<sup>®</sup> gearing
- Maintenance-free and long service life, due to special gear unit lubricants
- Low noise, due to optimum production methods



#### Compact parallel-shaft helical gearmotor of the F..DCA.. series

- Able to cope with overloads, due to tried-andtested helical gearing
- Efficient, because of modern gear unit design
- Versatile, because of hollow shaft or solid shaft design variants
- Suitable as a replacement to an additional belt transmission, due to parallel-shaft helical gear unit design
- Versatile, due to 2 sizes with 5 gear ratios each

## Not small – simply the perfect design

### Our efficient, compact extra-low voltage drives have been perfectly designed.

A look at the interior shows that they also contribute to sustainability thanks to their special characteristics.



### Your system benefits

 $\rightarrow$  Permanent magnet motors

with integrated power electronics for a wide control range and high efficiency

 $\rightarrow$  Optimized use of materials

configured for the rated power, resulting in a compact, lightweight drive unit

 $\rightarrow$  Flexible interface

that makes specific combinations of gear unit and motor possible



Want to learn more? You can find further information about this product here: www.sew-eurodrive.de/compact-extralow-voltage-drives

# Our compact extra-low voltage drives with an expanded range of gear units will increase the efficiency of your systems.

- $\rightarrow$  Compact design thanks to high power density
- $\rightarrow$  Economical energy use thanks to the high level of efficiency
- $\rightarrow$  Flexibility thanks to high level of integration



density igh level of efficiency tion

### **Technical data**

P motor Pn = 188 W									
na min <sup>-1</sup>	M Nm	i	F <sub>Ra</sub> N	SEW f <sub>B</sub>	Designa- tion	Gear unit	Motor		m kg
800	2.03	5	350	19.75	PNZ	63F	DCA63S	048P00/DBC00	2.2
267	5.47	15	350	12.44	PNZ	63F	DCA63S	048P00/DBC00	2.8
89	16.40	45	350	2.54	PNZ	63F	DCA63S	048P00/DBC00	2.8
597	2.71	6.7	250	0.73	KNZ	75F	DCA63S	048P00/DBC00	1.8
197	7.40	20.3	250	1.07	KNZ	75F	DCA63S	048P00/DBC00	2.2
74	17.71	54	600	1.26	KNZ	63F	DCA63S	048P00/DBC00	1.9
47	27.82	84.8	600	0.80	KNZ	63F	DCA63S	048P00/DBC00	1.9
609	2.51	6.57	900	4.78	W / WA	02	DCA63S	048P00/DBC00	2.75
390	3.69	10.25	900	4.07	W / WA	02	DCA63S	048P00/DBC00	2.75
242	5.57	16.5	900	2.69	W / WA	02	DCA63S	048P00/DBC00	2.75
143	8.82	28	900	1.70	W / WA	02	DCA63S	048P00/DBC00	2.75
83	12.96	48	900	1.16	W / WA	02	DCA63S	048P00/DBC00	2.75
609	2.51	6.57	1800	7.56	W / WA	03	DCA63S	048P00/DBC00	3.3
390	3.69	10.25	1800	6.78	W / WA	03	DCA63S	048P00/DBC00	3.3
242	5.57	16.5	1800	4.49	W / WA	03	DCA63S	048P00/DBC00	3.3
145	8.66	27.5	1800	2.89	W / WA	03	DCA63S	048P00/DBC00	3.3
83	12.96	48	1800	1.93	W / WA	03	DCA63S	048P00/DBC00	3.3
634	2.41	6.31	900	6.21	F / FA	02	DCA63S	048P00/DBC00	2.65
395	3.87	10.13	900	3.87	F / FA	02	DCA63S	048P00/DBC00	2.65
265	5.78	15.12	900	2.59	F / FA	02	DCA63S	048P00/DBC00	2.65
134	10.77	29.91	900	1.39	F / FA	02	DCA63S	048P00/DBC00	2.65
83	17.29	48.03	900	0.87	F / FA	02	DCA63S	048P00/DBC00	2.65
621	2.46	6.44	1800	12.18	F / FA	03	DCA63S	048P00/DBC00	3.6
397	3.86	10.08	1800	7.78	F / FA	03	DCA63S	048P00/DBC00	3.6
266	5.74	15.01	1800	5.23	F / FA	03	DCA63S	048P00/DBC00	3.6
131	10.98	30.51	1800	2.73	F / FA	03	DCA63S	048P00/DBC00	3.6
84	17.2	47.79	1800	1.74	F / FA	03	DCA63S	048P00/DBC00	3.6

P motor Pn = 272 W									
na min <sup>-1</sup>	M <sub>a</sub> Nm	i	F <sub>Ra</sub> N	SEW f <sub>B</sub>	Designa- tion	Gear unit	Motor		m kg
800	2.93	5	350	13.68	PNZ	63F	DCA63M	048P00/DBC00	2.5
267	7.90	15	350	8.61	PNZ	63F	DCA63M	048P00/DBC00	2.8
89	23.69	45	350	2.45	PNZ	63F	DCA63M	048P00/DBC00	2.8
74	25.59	54	600	0.87	KNZ	63F	DCA63M	048P00/DBC00	2.2
47	40.18	84.8	600	0.55	KNZ	63F	DCA63M	048P00/DBC00	2.2
609	3.63	6.57	900	3.31	W / WA	02	DCA63M	048P00/DBC00	3.05
390	5.33	10.25	900	2.81	W / WA	02	DCA63M	048P00/DBC00	3.05
242	8.04	16.5	900	1.86	W / WA	02	DCA63M	048P00/DBC00	3.05
143	12.74	28	900	1.18	W / WA	02	DCA63M	048P00/DBC00	3.05
609	3.63	6.57	1800	5.23	W / WA	03	DCA63M	048P00/DBC00	3.6
390	5.33	10.25	1800	4.69	W / WA	03	DCA63M	048P00/DBC00	3.6
242	8.04	16.5	1800	3.11	W / WA	03	DCA63M	048P00/DBC00	3.6
145	12.51	27.5	1800	2.00	W / WA	03	DCA63M	048P00/DBC00	3.6
83	18.72	48	1800	1.34	W / WA	03	DCA63M	048P00/DBC00	3.6
634	3.49	6.31	900	4.30	F / FA	02	DCA63M	048P00/DBC00	2.95
395	5.60	10.13	900	2.68	F / FA	02	DCA63M	048P00/DBC00	2.95
265	8.35	15.12	900	1.80	F / FA	02	DCA63M	048P00/DBC00	2.95
134	15.55	29.91	900	0.96	F / FA	02	DCA63M	048P00/DBC00	2.95
621	3.56	6.44	1800	8.43	F / FA	03	DCA63M	048P00/DBC00	3.9
397	5.57	10.08	1800	5.39	F / FA	03	DCA63M	048P00/DBC00	3.9
266	8.29	15.01	1800	3.62	F / FA	03	DCA63M	048P00/DBC00	3.9
131	15.87	30.51	1800	1.89	F / FA	03	DCA63M	048P00/DBC00	3.9
84	24.85	47.79	1800	1.21	F / FA	03	DCA63M	048P00/DBC00	3.9

### **Accessories**

#### P motor

Pn = 356 W

na min⁻¹	M <sub>a</sub> Nm	i	F <sub>Ra</sub> N	SEW f <sub>B</sub>	Designa- tion	Gear unit	Motor		m kg
800	3.83	5	350	10.46	PNZ	63F	DCA63L	048P00/DBC00	2.8
267	10.33	15	350	6.58	PNZ	63F	DCA63L	048P00/DBC00	3.4
89	30.98	45	350	1.87	PNZ	63F	DCA63L	048P00/DBC00	3.4
74	33.46	54	600	0.67	KNZ	63F	DCA63L	048P00/DBC00	2.5
47	52.55	84.8	600	0.42	KNZ	63F	DCA63L	048P00/DBC00	2.5
609	4.75	6.57	900	2.53	W / WA	02	DCA63L	048P00/DBC00	3.4
390	6.97	10.25	900	2.15	W / WA	02	DCA63L	048P00/DBC00	3.4
242	10.52	16.5	900	1.43	W / WA	02	DCA63L	048P00/DBC00	3.4
143	16.66	28	900	0.90	W / WA	02	DCA63L	048P00/DBC00	3.4
609	4.75	6.57	1800	4.00	W / WA	03	DCA63L	048P00/DBC00	4.0
390	6.97	10.25	1800	3.59	W / WA	03	DCA63L	048P00/DBC00	4.0
242	10.52	16.5	1800	2.38	W / WA	03	DCA63L	048P00/DBC00	4.0
145	16.36	27.5	1800	1.53	W / WA	03	DCA63L	048P00/DBC00	4.0
83	24.48	48	1800	1.02	W / WA	03	DCA63L	048P00/DBC00	4.0
634	4.56	6.31	900	3.29	F / FA	02	DCA63L	048P00/DBC00	3.3
395	7.32	10.31	900	2.05	F / FA	02	DCA63L	048P00/DBC00	3.3
265	10.92	15.12	900	1.37	F / FA	02	DCA63L	048P00/DBC00	3.3
621	4.65	6.44	1800	6.45	F / FA	03	DCA63L	048P00/DBC00	4.2
397	7.28	10.08	1800	4.12	F / FA	03	DCA63L	048P00/DBC00	4.2
266	10.84	15.01	1800	2.77	F / FA	03	DCA63L	048P00/DBC00	4.2
131	20.75	30.51	1800	1.45	F / FA	03	DCA63L	048P00/DBC00	4.2
84	32.50	47.79	1800	0.92	F / FA	03	DCA63L	048P00/DBC00	4.2

Option	Description				
Engineering adapter	The DCZ-048P-DBC-09 engin adapter is used for startup, p ization, and service procedure compact extra-low voltage driv intermediate adapter that is te connected between the motor customer's system.				
Interface adapter, USB to RS485 internal supply from USB interface	The interface adapter is conne engineering PC via a type B US The USM21A can connect an e PC with the DCZ engineering The data is transferred accordi USB 2.0 standard. It is also pos work with a USB 3.0 device.				
	Scope of delivery: – USM21A interface adapter – USB connection cable – Interface cable with 2 RJ10 c				
Hybrid cable for connecting the compact extra-low voltage drive	Thanks to the hybrid cable, the feature reliable connections, b required electrical contacts ca using a hybrid plug connector.				

**DCAShell engineering** software

#### The software is designed for Windows 10 and Windows 7.

You can download it free of charge at: www.sew-eurodrive.com  $\rightarrow$  Data & documents → Software → DCAShell



#### connectors





Further information can be found at: www.sew-eurodrive.de/compact-extra-low-voltage-drives



#### **SEW-EURODRIVE GmbH & Co KG**

Ernst-Blickle-Str. 42 76646 Bruchsal/Germany T+49725175-0 F+49725175-1970 sew@sew-eurodrive.com www.sew-eurodrive.com

