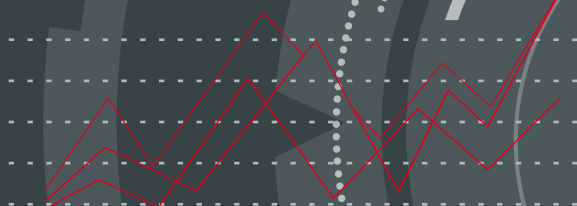


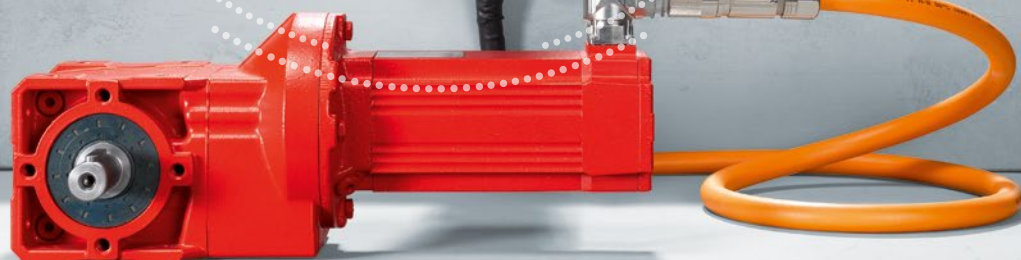
## MOVI-C® goes DriveRadar®

Digital motor integration with MOVILINK® DDI –  
enable connectivity and digitalization

7022011-0002899-770-000  
339611900-SDFL-WQQ-

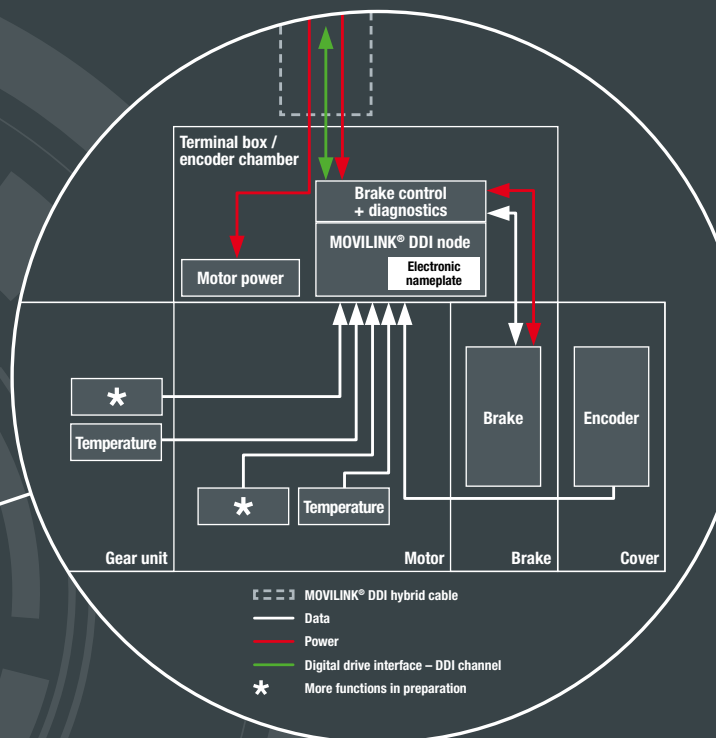
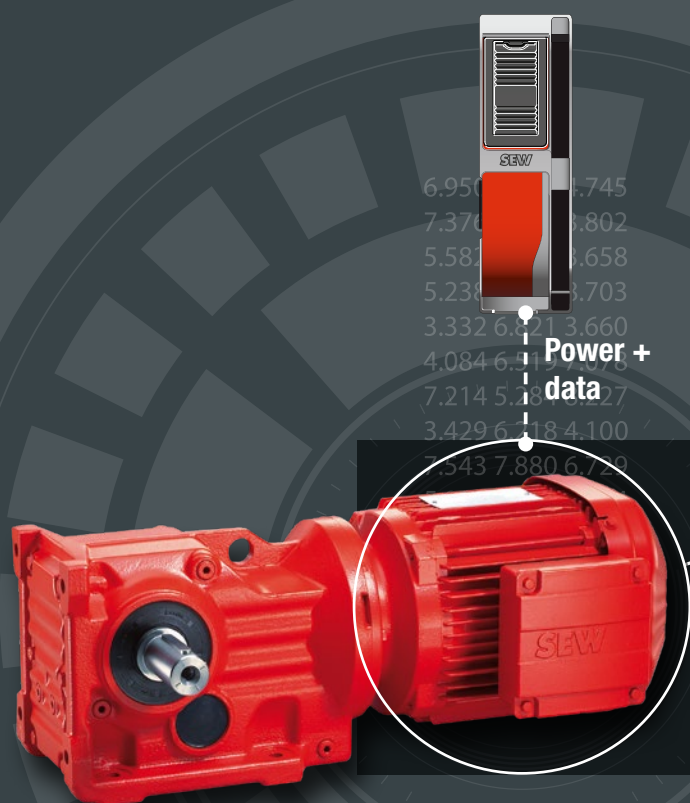


6.950 5.298 4.745  
7.376 8.919 3.802  
5.582 4.351 3.658  
5.238 4.808 8.703  
3.332 6.821 3.560  
4.084 6.519 7.078  
7.214 5.284 8.227  
3.429 6.218 4.100  
7.543 7.880 5.729  
5.904 6.570 6.844



## Improving system availability with DriveRadar®

The umbrella brand DriveRadar® combines intelligent and scalable services for a smart, networked factory. Thanks to these services, users can monitor and analyze simple electromechanical components, individual process steps, or entire systems. This makes it possible to predict the condition of systems and schedule maintenance work. DriveRadar® significantly improves product and system availability (OEE). Drives need to communicate more to share and interpret information and data. This is exactly where digital motor integration comes in.



## MOVILINK® DDI digitalizes drives

With MOVILINK® DDI – digital motor integration from the MOVI-C® modular automation concept – you can make functions your factory will need in the future a reality right now. The basis for this is our single-cable technology, which we use to connect drives to power and data.

All inverters forming part of the MOVI-C® modular concept are equipped with MOVILINK® DDI communication technology. The drives are given a MOVILINK® DDI data node that acts as the digitalization hub. All communication between drive and inverter takes place via this data node, as does control of the numerous MOVILINK® DDI options.

## MOVILINK® DDI – digital motor integration

### Your benefits

- DriveRadar® from SEW-EURODRIVE is supported by a digitalized drive
- Connectivity system for motor, inverter, encoder, brake, sensor, and other options
- Optimized parts logistics
- A single cable for all motors and drives
- Significantly shorter installation times
- Plug & play thanks to automatic startup
- Electronic nameplate with digital twin
- Fully integrated motor temperature management
- Integrated connection of encoders in all performance classes
- Brake by wire – digital control of working and holding brakes\*
- Direct monitoring of braking system wear\*
- Optional condition monitoring integrated in motor\*
- Intelligent self-diagnosis functions – from bearing monitoring to sensors for oil aging and mounting position\*

\* In preparation



For more information about DriveRadar®, MOVILINK® DDI,  
and the extensive service and product portfolio, please visit  
[www.sew-eurodrive.com](http://www.sew-eurodrive.com)
























[www.sew-eurodrive.com](http://www.sew-eurodrive.com)





# MOVI-C® with digital motor integration

## MOVILINK® DDI – enable connectivity and digitalization

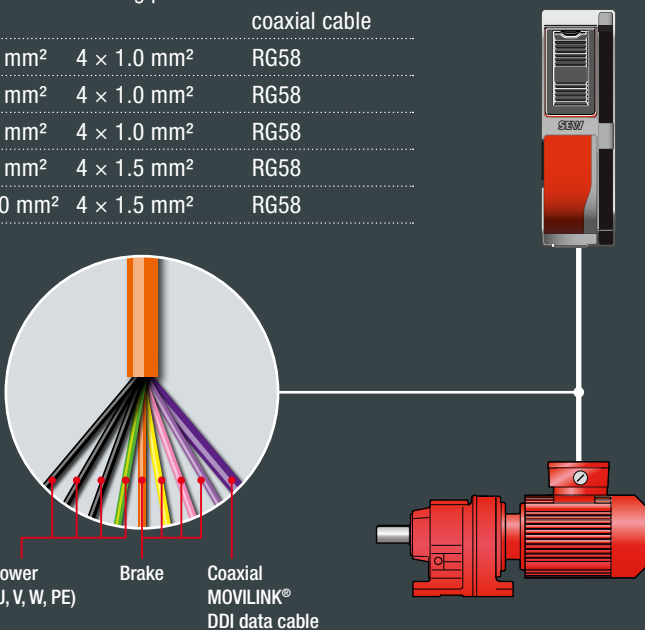
Frequency inverters					Decentralized technology	MOVIMOT® flexible	MOVIMOT® advanced	MOVIMOT® performance	MOVIGEAR® performance
Control cabinet technology									
Brief description	Standard inverter for plant automation	Application inverter for single-axis automation in conjunction with MOVIDRIVE® modular	Application inverter for single-axis automation	Application inverter for multi-axis automation		Decentralized inverter with field distributor function	Asynchronous motor with decentralized inverter	Synchronous motor with decentralized inverter	Drive unit consisting of synchronous motor, gear unit, and decentralized inverter
Synchronous motor operation									
Asynchronous motor operation									
Power rating	0.25 – 315 kW	0.55 – 315 kW	0.55 – 315 kW	0.6 – 90 kW		0.55 – 3 kW (depending on motor type; up to 7.5 kW in preparation)	0.37 – 2.2 kW (3 – 7.5 kW in preparation)		0.75 – 2.2 kW
I <sub>output</sub>	1 – 588 A	2 – 588 A	2 – 588 A	2 – 180 A	I <sub>output</sub>	2.0 – 5.5 A (7 – 16 A in preparation)			2.0 – 5.5 A
AC supply voltage	3 × 380 – 500 V / 3 × 200 – 240 V / 1 × 200 – 240 V	3 × 380 – 500 V	3 × 380 – 500 V	3 × 380 – 500 V	AC supply voltage	3 × 380 – 500 V			
Overload	150% for 30 s	200% for 3 s	200% for 3 s	250% for 1 s	Overload	Up to 300% for 5 s	Up to 210%	Up to 300% for 5 s	

### Connection technology

#### Single-cable technology – one cable (cable cross-section) can be used for all drives

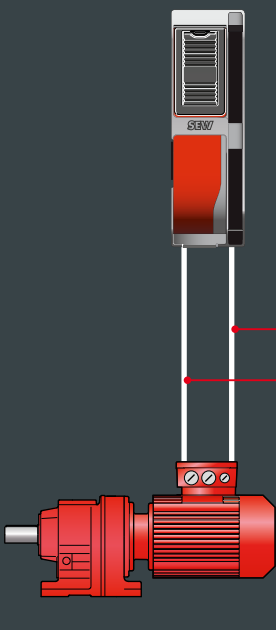
Hybrid cable with combination of motor power / braking power / MOVILINK® DDI coaxial cable

4 × 1.5 mm²	4 × 1.0 mm²	RG58
4 × 2.5 mm²	4 × 1.0 mm²	RG58
4 × 4.0 mm²	4 × 1.0 mm²	RG58
4 × 6.0 mm²	4 × 1.5 mm²	RG58
4 × 10.0 mm²	4 × 1.5 mm²	RG58



Power (U, V, W, PE) Brake Coaxial MOVILINK® DDI data cable

#### Multi-cable technology **Planned**



Triaxial MOVILINK® DDI data cable Power (motor and brake)

#### Variants

Cable design for frequency inverter

- M40 plug connector
- M23 plug connector
- Power open with Fakra connector

Cable type


















- Fixed installation
- Cable carrier installation










Cable cross-section

- > 16 mm² **Planned**
- 6 – 10 mm²
- 1.5 – 4 mm²
- Single coax **Planned**

Type of connector for drive

- M40 plug connector **Planned**
- Cable gland (terminal box)
- M23 plug connector

Asynchronous motors		Synchronous motors				Linear motors	
DRN71 – 132S (– 315)	DR2.71 – 80 (– 225)	CMP(40) 50 – 100 (112)	CM3C63 – 100	MOVIGEAR® classic	MOVIGEAR® performance	SLC <b>Planned</b>	SL2 <b>Planned</b>
<p>Sensor technology*</p> <ul style="list-style-type: none"><li></li><li></li><li></li></ul> <p>Encoder</p> <ul style="list-style-type: none"><li>El8Z, 12 bit</li><li>EK8Z, &gt; 18 bit</li><li>AK8Z, &gt; 18 bit (AI8Z, 12 bit) <b>Planned</b></li><li> <b>Planned</b></li></ul> <p>Auto startup</p> 		<p>Sensor technology*</p> <ul style="list-style-type: none"><li></li><li></li><li></li></ul> <p>Encoder</p> <ul style="list-style-type: none"><li></li><li>AZ2Z, 12 bit (AZ4Z, 18 bit) <b>Planned</b></li><li>EZ2Z, 12 bit (EZ4Z, 18 bit) <b>Planned</b></li><li> <b>Planned</b></li></ul> <p>Auto startup</p> 		<p>Sensor technology*</p> <ul style="list-style-type: none"><li></li></ul> <p>Encoder</p> <ul style="list-style-type: none"><li>AZ1Z, 12 bit (AZ3Z, 18 bit) <b>Planned</b></li><li> <b>Planned</b></li></ul> <p>Auto startup</p> 		<p>Encoder</p> <ul style="list-style-type: none"><li> (EL3Z, &lt; 1 mm) <b>Planned</b></li><li> <b>Planned</b></li></ul> <p>Auto startup</p> 	

Key	
Motor monitoring	
– Vibration, temperature	
Gear unit monitoring	
– Vibration, temperature, oil condition	
Intelligent brake rectifier	
– Brake control, temperature, wear	
Control without encoder	
Incremental encoder	
Single-turn absolute encoder	
Multi-turn absolute encoder	
Functional safety possible	
Electronic nameplate	
Planned function	<b>Planned</b>

