## **Amphenol**<sup>®</sup>



#### **HELIOS H4**

Industrial Operations (AIO) offers products and solutions for all segments of the solar electric system. AIO understands the need for efficient (low loss) power transfer, highly reliable, and cost effective solutions that are required to be competitive in this industry. We can provide panel manufacturers, installers, and OEM's with connectivity products for both thin film and crystalline silicon technologies. **Amphenol** has a broad range of technologies to help minimize the cost of inverters and power conditioners. **Amphenol** Industrial can help you power the planet with the sun. The Helios H4 connector is just one of the solar connector solutions **Amphenol** Industrial has to offer.

## H4 Features:

- Fully intermateable with industry standard
- Meets all new NEC 2008 requirements
- Quick and easy secure snap lock mating
- Simple unlocking tool meets NEC requirements
- Long-term UV and Ozone resistance
- Highest current rating in industry
- RoHS compliant
- Complete Cable Assemblies available
- Low contact resistance means low power loss
- Ready for field assembly
- No assembly required, no small parts to lose

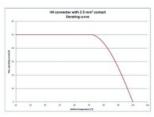
# Helios Hu Amphenol solar connector

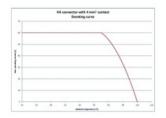


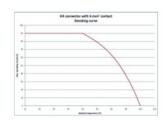
#### **Technical Data**

Rated current	36A(2.5mm <sup>2</sup> ,AWG14),45A(4.0mm <sup>2</sup> ,AWG12),52A(6.0mm <sup>2</sup> ,AWG10)		
Rated voltage	1000V (IEC/CEI), 600V(UL)		
Test voltage	6kV for 1 minute, 10kV impulse (1.2/50µS)(IEC)		
Typical contact resistance	0.25mΩ		
Contact material	Copper, tin plated		
Contact system	Machined/cold formed contact with Radsok <sup>®</sup> insert		
Insulation material	PBT/PC		
Locking mechanism	Snap-lock, special unlock tool required to un-mate as required by NEC2008		
Cable strain relief	Compression gland with ratcheting gland nut		
Degree of protection	IP68 (1 meter, 1 hour) mated, IP2X unmated (IEC60529)		
Safety class	II (IEC61140)		
Pollution degree	2 (IEC60664)		
Overvoltage category	III (IEC60664)		
Flammability class	UL94-V0		
Temperature range	-40°C +90°C (IEC/CEI), max. temperature +105°C(IEC/CEI)		

## **Derating curves**







#### **Connector part numbers**

		2,5SQMM/AWG14	4,0SQMM/AWG12	6,0SQMM/AWG10
Cable connector male		PV-100507-M	PV-100508-M	PV-100506-M
Cable connector female		PV-100507-F	PV-100508-F	PV-100506-F
Cable connector mated pair		PV-100507-000	PV-100508-000	PV-100506-000
Panel mount receptacle male	SAPPENDL -	PV-080511-M	PV-080509-M	PV-080510-M
Panel mount receptacle female		PV-080511-F	PV-080509-F	PV-080510-F
Panel mount receptacle mated pair		PV-080511-000	PV-080509-000	PV-080510-000

#### **Tooling partnumbers**

Crimp tool for 2,5SQMM-6SQMM (AWG10-AWG14) PV-670508-000



Strip tool for 2,5SQMM-6SQMM (AWG10-AWG14) PV-670509-000

Unlocking ring tool PV-670804-000



Wrench/disconnect/assembly tool PV-670803-000

North America: Amphenol Industrial Operations 40-60 Delaware Avenue, Sidney, NY 13838-1395 Tel: 1-520-285-5114 1-888-364-9011 Fax: 1-520-397-7169 E-mail: energy@amphenol-aio.com d from Eleodis.com

Downloa

For further information on your individual application requirements, contact: Amphenol Corporation

#### Europe: Amphenol Industrial Operations Europe Via Barbaiana 5 1-20020 Lainate (MI) Italy Tel: +39 02 93254.204 Fax:+39 02 93254.444 Email:info@amphenol-aio.com

Middle East: Amphenol Middle East Enterprises FZE Office C-37 PO Box 21107 Ajman Free Zone, UAE Tel: +9716-7422494 Fax:+9716-7422941 Email:ameefze@eim.ae

#### Asia:

ASIa. Amphenol Technology Shenzhen Ltd Block 5 Fuan 2nd Industrial Park Dayang Rd, Fuyong Baoan Baoan, Shenzhen, China 518103 Tel: +86 755 2881 8389 Fax:+86 755 2991 8310 Email:enquiry@amphenol-industrial.com