

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20161202-E48031  
**Report Reference** E48031-20061129  
**Issue Date** 2016-DECEMBER-02

**Issued to:** PAUL VAHLE GMBH & CO KG  
POSTFACH 1720  
59172 KAMEN GERMANY

**This is to certify that  
representative samples of**

CRANE AND HOIST ELECTRIFICATION SYSTEMS  
Crane and Hoist Electrification Systems – Type KBH Series  
enclosed conductor system (continued on the next page)

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

**Standard(s) for Safety:**

UL508, Industrial Control Equipment  
CSA C22.2 No. 33-M1984, Construction and Test of  
Electric Cranes and Hoists  
UL857 and CSA C22.2 No. 27-09, Busways

**Additional Information:**

See the UL Online Certifications Directory at  
[www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's  
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Component Description	Type Designation followed by a number of characters up to 40 letters or numbers	Rating
Contact Conductor	KBHF 3/4/5-40 HS KBHF3-5/63H	52 A ,600 Vac, 60% duty cycle 45 A ,600 Vac, 80% duty cycle 40 A ,600 Vac
	KBHF 3/4/5-40 SS KBHF3-5/63S	52 A ,600 Vac, 60% duty cycle 45 A ,600 Vac, 80% duty cycle 40 A ,600 Vac
	KBHF 3/4/5-63 HS KBHF3-5/80H	81 A ,600 Vac, 60% duty cycle 70 A ,600 Vac, 80% duty cycle 63 A ,600 Vac
	KBHF 3/4/5-100 HS KBHF3-5/100H	129 A ,600 Vac, 60% duty cycle 112 A ,600 Vac, 80% duty cycle 100 A ,600 Vac
	KBHF 3/4/5-100 SS KBHF3-5/100S	129 A ,600 Vac, 60% duty cycle 112 A ,600 Vac, 80% duty cycle 100 A ,600 Vac
	KBHS 3/4/5-40 HS KBHS3-5/63H	52 A ,600 Vac, 60% duty cycle 45 A ,600 Vac, 80% duty cycle 40 A ,600 Vac
	KBHS 3/4/5-40 SS KBHS3-5/63S	52 A ,600 Vac, 60% duty cycle 45 A ,600 Vac, 80% duty cycle 40 A ,600 Vac
	KBHS 3/4/5-63 HS KBHS3-5/80H	81 A ,600 Vac, 60% duty cycle 70 A ,600 Vac, 80% duty cycle 63 A ,600 Vac
	KBHS 3/4/5-100 HS KBHS3-5/100H	129 A ,600 Vac, 60% duty cycle 112 A ,600 Vac, 80% duty cycle 100 A ,600 Vac
	KBHS 3/4/5-125 HS KBHS3-5/125H	161 A ,600 Vac, 60% duty cycle 140 A ,600 Vac, 80% duty cycle 125 A ,600 Vac
	KBHS 4/5-160 HS KBHS4-5/160H	207 A ,600 Vac, 60% duty cycle 179 A ,600 Vac, 80% duty cycle 160 A ,600 Vac
	KBHS 4/5-200 HS KBHS4-5/200H	258 A ,600 Vac, 60% duty cycle 224 A ,600 Vac, 80% duty cycle



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Component Description	Type Designation followed by a number of characters up to 40 letters or numbers	Rating
Transfer Funnel	KET 3/4/5 40-125 HS L/R ET-KET3-5/63-125-L/R-H	40-125 A , 600 Vac
	KET 4/5 160 HS L/R ET-KET4-5/160-L/R-H	160 A , 600 Vac
	KET 4/5 200 HS L/R ET-KET4-5/200-L/R-H	200 A , 600 Vac
	KET 3/4/5 40 SS L/R ET-KET3-5/63-L/R-S	40 A , 600 Vac

Transfer Guide	KÜ 3/4/5 40-125 HS L/R UE-*KÜ3-5/63-125-L/R-H	40-125 A , 600 Vac
* (E) optional	KÜ 4/5 160 HS L/R UE-*KÜ4-5/160-L/R-H	160 A , 600 Vac
	KÜ 4/5 200 HS L/R UE-*KÜ4-5/200-L/R-H	200 A , 600 Vac
	KÜ 3/4/5 40 SS L/R UE-*KÜ3-5/63-L/R-S	40 A , 600 Vac
	KÜS 3/4/5 40-125 HS L/R UE-*KÜS3-5/63-125-L/R-H	40-125 A , 600 Vac
	KÜS 4/5 160 HS L/R UE-*KÜS4-5/160-L/R-H	160 A , 600 Vac
	KÜS 4/5 200 HS L/R UE-*KÜS4-5/200-L/R-H	200 A , 600 Vac
	KÜS 3/4/5 40 SS L/R UE-*KÜS3-5/63-L/R-S	40 A , 600 Vac

Joint-Cap	KVM VM-KVM	Non-electrical
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Sliding Hanger	KGA AH-KGA	Non-electrical
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Fixed Hanger	KFA AH-KFA	Non-electrical
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End-Cap	KE EK-KE	Non-electrical
Cable Glands for Feeds	All diameters	Non-electrical
Sealing Strip	Sealing strip, per pair	Non-electrical
Tow Arms	MN-MGUN / MN-MGUN/K / MN-MGFN / MN-MGFN/K	Non-electrical
Flexible support type	MN-KFMHN	Non-electrical
Conductor dead section	ST-KTL 1/ 2/ 3/ 4/ 5 ST-KTI 1/ 2/ 3/ 4/ 5	Non-electrical
End feed	KKE 3/4/5 40-63 HS ES-KKE3-5/63-80H KKE 3/4/5 40-63 SS ES-KKE3-5/63-80S KKE 3/4/5 100 HS ES-KKE3-5/63-100H	40-63 A , 600 Vac    63-100A, 600 Vac



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Line Feed	KSE 3/4/5 40 HS ES-KSE3-5/63H	40 A , 600 Vac
	KSE 3/4/5 40 SS ES-KSE3-5/63S	40 A , 600 Vac
	KSE 3/4/5 63 HS ES-KSE3-5/80H	63 A , 600 Vac
	KSE 3/4/5 100 HS ES-KSE3-5/100H	100 A , 600 Vac
	KEF 3/4/5 40 HS ES-KEF3-5/63H	40 A , 600 Vac
	KEF 3/4/5 40 SS ES-KEF3-5/63S	40 A , 600 Vac
	KEF 3/4/5 63 HS ES-KEF3-5/80H	63 A , 600 Vac
	KEF 3/4/5 100 HS ES-KEF3-5/100H	100 A , 600 Vac
	KES 3/4/5 40 HS ES-KES3-5/63H	40 A , 600 Vac
	KES 3/4/5 40 SS ES-KES3-5/63S	40 A , 600 Vac
	KES 3/4/5 63 HS ES-KES3-5/80H	63 A , 600 Vac
	KES 3/4/5 100 HS ES-KES3-5/100H	100 A , 600 Vac
	KES 3/4/5 125 HS ES-KES3-5/125H	125 A , 600 Vac
	KES 4/5 160 HS ES-KES4-5/160H	160 A , 600 Vac
	KES 4/5 200 HS ES-KES4-5/200H	200 A , 600 Vac
	KELS 4/5 125 HS ES-KELS4-5/125H	125 A , 600 Vac
	KELS 4/5 160 HS ES-KELS4-5/160H	160 A , 600 Vac
	KELS 4/5 200 HS ES-KELS4-5/200H	200 A , 600 Vac
Expansion Joint Section	KD 3/4/5 40 SS DT-KD3-5/63S	40 A , 600 Vac



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	KD 3/4/5 40-125 HS DT-KD3-5/63-125H	40-125 A , 600 Vac
	KD 4/5 160 HS DT-KD4-5/160H	160 A , 600 Vac
	KD 4/5 200 HS DT-KD4-5/200H	200 A , 600 Vac
*Heating System	Heating Output [Watt/m] $N = U^2 / (R \times L) ^ 2$	Optional. Heating cable 0.1 - 5.6 Ohm/m.

Anti-Condensation Sections	KBT 3/4/5 40-125 HS BT-KBT3-5/63-125H	40-125 A, 600 Vac
	KBT 3/4/5 40 SS BT-KBT3-5/63S	40 A, 600 Vac
	KBT 4/5 160 HS BT-KBT4-5-160H	160 A, 600 Vac
	KBT 4/5 200 HS BT-KBT4-5/200H	200 A, 600 Vac

Maintenance section	KAT 3/4/5 40-125 HS AT-KAT3-5/63-125H RVT-KRT3-5/63-125H	40-125 A, 600 Vac
	KAT 3/4/5 40 SS AT-KAT3-5/63S RVT-KRT3-5/63S	40 A, 600 Vac
	KAT 4/5 160 HS AT-KAT4-5/160H RVT-KRT3-5/160H	160 A, 600 Vac
	KAT 4/5 200 HS AT-KAT4-5/200H RVT-KRT4-5/200H	200 A, 600 Vac
	KATD 3/4/5 40-125 HS AT-KATD3-5/63-125H	40-125 A, 600 Vac
	KATD 3/4/5 40 SS AT-KATD3-5/63S	40 A, 600 Vac
	KATD 4/5 160 HS AT-KATD4-5/160H	160 A, 600 Vac
	KATD 4/5 200 HS AT-KATD4-5/200H	200 A, 600 Vac

Collector Trolleys	KSW 3/4/5 25 HS SA-KSW3-5/25- (*)H	25 A, 600 Vac ,60% duty cycle
	KSW 3/4/5 25 ST	25 A, 600 Vac ,60% duty cycle

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	SA-KSW3-5/25-(*)S	
	KSW 3/4/5 40 HS SA-KSW3-5/40-(*)H	40 A, 600 Vac ,60% duty cycle
	KSWS 3/4/5 25 HS SA-KSWS3-5/25-(*)H	25 A, 600 Vac ,60% duty cycle
	KSWS 3/4/5 25 ST SA-KSWS3-5/25-(*)S	25 A, 600 Vac ,60% duty cycle
	KSWS 3/4/5 40 HS SA-KSWS3-5/40(*)H	40 A, 600 Vac ,60% duty cycle
	DKSW 3/4/5 50 HS SA-DKSW3-5/50-(*)H	50 A, 600 Vac ,60% duty cycle
	DKSW 3/4/5 50 ST SA-DKSW3-5/50-(*)S	50 A, 600 Vac ,60% duty cycle
	DKSW 3/4/5 80 HS SA-DKSW3-5/80-(*)H	80 A, 600 Vac ,60% duty cycle



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