

Qualification Nos. of Respective Standards

●<PS>E Products Certified by Qualification Tests under the Electrical Appliance Safety Law

Name	Type	Certificate Number	Certificate old Number	
Power Outlet Plug	125V Max., 3A Max.	JET0071-43001-1003	41-8348	
	125V Max., 3A Min. 7A Max.	JET0071-43001-1001	41-7202	
	125V Max., 3A Min. 7A Max.	JET0071-43001-1002	41-17988	
	125V Max., 3A Min. 7A Max. 2Poles, including the ground	JET0071-43001-1004	41-15335	
	125V Max., 7A Min. 15A Max.	JET0071-43001-1005	41-6196	
Power Outlet Plug for Appliance	125V Max., 7A Min. 15A Max.	JET0071-43001-1006	41-16666	
	125V Max., 3A Min. 7A Max. 2Poles, including the ground	JET0071-43006-1001	41-18861	
Power Inlet Socket	125V Max., 3A Min. 7A Max.	JET0071-43004-1001	41-7166	
	125V Max., 10A Min. 15A Max.	JET0071-43004-1002	41-7167	
Power Inlet Sockets	125V Max., 10A Min. 15A Max.	JET0071-43003-1001	41-9684	
Single-Core PVC Cord	VSF	JET0071-12005-1001	12-1385	
	S-HVSF	JET0071-12005-1002	12-3168	
Single-Core Polyethylene Cord	EM-CSF	JET0071-12017-1001	—	
PVC flat Cord	VFF	JET0071-12011-1002	12-1386	
	VFF (Multi-flat)	JET0071-12011-1001	12-4123	
	S-HVFF	JET0071-12011-1003	12-5454	
Polyethylene flat Cord	EM-CFF	JET0071-12016-1001	—	
Sheathed Flexible Cord	VCTF, VCTFK	JET0071-12009-1001	12-1384	
	HVCTF, HVCTFK (Core:60°C)	JET0071-12009-1002	12-5335	
	HVCTF, HVCTFK (Core & Sheath:Rated Temp.)	JET0071-12009-1003	12-3167	
	EM-CCTF, EM-CCTFK	JET0071-12019-1002	—	
PVC Sheathed Flexible Cable	VCT	JET0071-12012-1002	12-1906	
	HVCT	JET0071-12012-1003	12-6258	
Plastic-Insulated Cable	KIV (8mm ² Max.)	JET0071-12001-1006	12-5379	
	KIV (8mm ² Min. 32mm ² Max.)	JET0071-12001-1003	12-8067	
	ULCE-KIV	60227 IEC 02	JET0071-12001-2001	—
		HKIV	JET0071-12001-1007	12-5380
	HKIV (8mm ² Max.)	JET0071-12001-1004	12-8066	
	HKIV (8mm ² Min. 32mm ² Max.)	JET0071-12001-1005	12-9472	
	EM-KIC (8mm ² Max.)	JET0071-12001-1008	—	
	EM-KIC (8mm ² Min. 32mm ² Max.)	JET0071-12001-1001	12-8793	
HIV (8mm ² Max.)	JET0071-12004-1002	12-8845		
Cable	CV	JET0071-12004-1001	—	
	H-CV	JET0071-12004-1003	12-9483	
	H EM-CE	JET0071-12010-1001	12-2884	
Tinsel Cord	TYVFF	JET0071-12010-1002	12-9654	
	TYVCTF	JET0071-12010-1002	12-9654	

●JIS (Japanese Industrial Standards) Certified Products

Products	Type	Factory	Certificate Number
PVC Cord	VSF, HVSF, VFF, HVFF, VCTF, HVCTF, VCTFK, HVCTFK	Osaka Factory	JE0507015
		Chiba Factory	JE0507014
Coaxial Cables	S-4C-FB, S-5C-FB, S-7C-FB	Osaka Factory	JE0507013

●TUV Certified Products

Products	Type	Factory	Certificate Number
450V/750V 90°C	H07V2-K (1.5mm ² , 2.5mm ² , 4.0mm ² , 6.0mm ²)	Osaka Factory	R50091891
AC U ₀ /U 0.6/1kV	PV1-F (2.5mm ² , 4.0mm ² , 6.0mm ²)	Osaka Factory	R50197322

●UL Standards Certified Products

Standard	Type	Name	File Number
UL758	Style No.	Appliance Wiring Material	E58095
CSA-C22.2 No. 210	I A/B	Appliance Wiring Material for Canada	E58095
UL1063	60°C WET 90°C DRY 600V	Machine-Tool Wires and Cables	E310419
SUBJECT 4703	90°C WET OR DRY 600V, 2000V	PHOTOVOLTAIC WIRE (10AWG, 12AWG, 14AWG)	E315108
UL854	90°C WET OR DRY 600V	Service-Entrance Cables	E234932

Outline of National and Overseas Safety Standards and RoHS Directives

■ Electrical Appliance and Material Safety Law

This law is designed to prevent fires, accidents and other hazards caused by electrical appliances through the promotion of the voluntary activities of private companies to secure appliance safety. Any business proprietor who wants to manufacture or import electrical appliances is obligated to report it to the Economy, Trade and Industry Minister. It is required that the proprietor has the appliances to be manufactured or imported comply with the technical standards set forth by the ministry. The said law stipulates that any appliance with particular potentials to cause danger and/or hazard be defined by government ordinance as 'specific electrical appliance.' The proprietor who plans to make or import such an appliance should put it to qualification tests by an inspection institution authorized or approved by the minister. The proprietor is then supposed to receive a qualification certificate from the ministry and keep it in custody. Further, the proprietor shall make and keep inspection records and label qualification evidence on the relevant appliance.

KHD's cables and power cords with plug carry on them a <PS>E mark and the name of a certifying organization (JET: Japan Electrical Safety & Environment Technology Laboratories) to show that they are qualified as specific electrical appliances.

■ Voluntary registration system for flame-retardant cables for electrical appliances (F-mark)

The F-mark on a cable represents that the cable has been qualified and registered as flame retardant by a third-party, the Japan Quality Assurance Organization or JQA, as a result of JQA's sample testing and factory screening in accordance with the Electrical Appliance Technical Standards Appendix Table 8 Combustion Testing (Vertical).

This test system, applicable only in Japan, was instituted corresponding to the American UL's VW-1 test system.

■ UL and cUL

UL or Underwriters Laboratories Inc. is an American corporation which sets forth the UL Standards for qualifying and continuously authorizing electrical products to protect lives and properties from a fire or an electric shock.

The cUL mark can be labeled on a product that has passed Canadian CSA standards tests conducted by UL. UL is supposed to test and qualify, as well as undertake follow-up services for, electrical appliances imported in Canada on the commission from the Canadian Standards Association.

Products labeled cUL are regarded same as those CSA authorized. All products sold in Canada must be CSA qualified. The CSA Standards are globally known together with the UL Standards.



USA



CANADA



USA & CANADA



LISTED

UL Recognized Component Marks

A qualified product and its package are supposed to indicate the relevant mark and the relevant mark sticker applied on the package.

■ CE Marking

The CE (Conformité Européen) marking of a product by its manufacturer or importer indicates that the product complies with an relevant EC directive of the European Union. Such marking assures the product to be freely marketed in EU member countries. EC directives, which are put into effect by an EU Council of Ministers directive, include a machinery directive, an EMC directive and a low-voltage directive. Although no independent directive is issued for wires, the low-voltage directive is applicable for them since they are considered to be an important product relating to safety. Also, wires have the CE marking to avoid trouble in EU member countries.

■ Comite Europeen de Normalisation Electrotechnique

There are two kinds of standards set forth by the CENELEC or Comité Européen de Normalisation Électrotechnique: the Norme Européenne (European Standards) and the HD (Harmonization Document) Standards; the latter tentatively issued. Wires are defined in HD 21.

■ Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

RoHS or the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment was put into effect by the EU on 1st July 2006. The RoHS prohibits the use of the following 6 substances in the electrical and electronic equipment handled in EU member countries: lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (Cr), polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE).