



SAFETY STANDARDS CATALOG

March 3, 2009

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
B65 Standards		
1100105	B65.1-2005 Graphic technology - Safety standard - Printing press systems This standard provides safety specifications for the design and construction of machines used in printing press systems. It is a reflection of harmonization of U.S., European and international safety requirements. Also includes additional user safety recommendations. 114 pp.	\$30.00
1100205	B65.2-2005 Graphic technology - Safety standard for binding and finishing systems and equipment This standard is a modified national adoption of ISO 12649:2004, with changes specific to the U.S market. It provides safety specifications for the design and construction of binding and finishing equipment operated in a system configuration or in stand-alone mode. It applies to equipment used to convert printed or blank substrates into cut, folded, collated, assembled, bound, or otherwise finished product. It may also be applied to processes for preparing substrate for the printing process. 130 pp.	\$30.00
1100101	B65.3-2001(R2006) Safety standard - Guillotine paper cutters, mill trimmers and integral handling equipment This standard specifies operational & mechanical safety specifications for the design and use of guillotine cutters, mill trimmers and integral handling equipment, when they are used as intended, under conditions foreseen by the manufacturers. 32 pp.	\$25.00
1100102	B65.4-2002(R2007) Safety standard - Three-knife trimmers, including rotary, and single- and multiple-knife trimmers This standard specifies operational and mechanical safety specifications for the design and use of stand-alone three-knife trimmers, when they are used as intended and under the conditions foreseen by the manufacturers. It addresses significant mechanical hazards but does not address other hazards such as shock, explosion, fire, noise/sound levels or exposure to chemicals. This standard does not address all hazards that may exist during maintenance operations. For maintenance operations, OSHA lockout/tagout regulations may apply. 51 pp.	\$25.00
1100106	B65.5-2006 Safety standard - Stand-alone platen presses This standard provides operational and mechanical safety specifications for the design and use of webfed and sheetfed stand-alone platen press systems intended for diecutting, embossing, foil stamping and/or printing of paper, board and other materials processed in a similar manner. 30 pp.	\$15.00
1100206	B65/NAPIM 177.1-2007 Safety standard – Three-roll printing ink mills This standards establishes safety requirements with respect to safety controls, operating procedures and design of three-roll mills. used in the manufacture of printing inks. 14 pp.	\$35.00
1100306	B65/NAPIM 177.2-2006 Safety standard – Printing ink vertical post mixers This standard provides safety requirements with respect to the design and operation of vertical post mixers that are designed to be used in the manufacturing of printing inks. 10 pp.	\$35.00
ISO Standards <i>(These publications are also available from ISO member bodies.)</i>		
1400704	ISO 7000:2004 Graphical symbols for use on equipment – Index and synopsis This International Standard provides a synopsis of those graphical symbols that are placed on equipment or parts of equipment of any kind in order to instruct the person(s) using the equipment as to its operation. 200 pp.	\$249.00
1400903	ISO 7010:2003 Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas This International Standard prescribes safety signs for the purposes of accident prevention, fire protection, health hazard information and emergency evacuation. 32 pp.	\$110.00
1400306	ISO 7010 Amd 1:2006 Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas This amendment to the 2003 standard defines 11 additional safety signs. 12 pp.	\$16.00
1400807	ISO 7010 Amd 2:2007 Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas This 2 nd amendment to the 2003 standard defines 18 additional safety signs. 19 pp.	\$16.00
1400109	ISO 7010 Amd 3: 2007 Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas This 3 rd amendment to the 2003 standard defines 2 additional safety signs . 8 pp.	\$16.00
1400209	ISO 7010 Amd 4: 2009 Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas This 4 th amendment to the 2003 standard defines 21 additional safety signs. 28 pp.	\$16.00
1401109	ISO 8031:2009 Rubber and plastics hoses and hose assemblies - Determination of electrical resistance This International Standard specifies electrical test methods for rubber and plastics hoses, tubing and hose assemblies to determine the resistance of conductive, antistatic and non-conductive hoses and the electrical continuity or discontinuity between metal end fittings. 15 pp.	\$86.00
1404299	ISO 9355-1:1999 Ergonomic requirements for the design of displays and control actuators - Part 1: Human interactions with displays and control actuators This International Standard applies to the design of displays and control actuators on machinery. It specifies general principles for human interaction with displays and control actuators, to minimize operator errors and to ensure an efficient interaction between the operator and	\$80.00

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	the equipment. It is particularly important to observe these principles when an operator error may lead to injury or damage to health. 14 pp.	
1404699	ISO 9355-2:1999 Ergonomic requirements for the design of displays and control actuators - Part 2: Displays This International Standard gives guidance on the selection, design and location of displays to avoid potential ergonomic hazards associated with their use. It specifies ergonomics requirements and covers visual, audible and tactile displays, and applies to displays used in machinery (e.g. devices and installations, control panels, operating and monitoring consoles) for occupational and private use. 22 pp.	\$92.00
1400706	ISO 9355-3:2006 Ergonomic requirements for the design of displays and control actuators - Part 2: Control actuators This International Standard specifies the ergonomic requirements for, and guidance on, the selection, design and location of control actuators adapted to the needs of the operator, suitable for the control task in question and taking account of the circumstances of their use. 34 pp.	\$129.00
1400805	ISO 11553-1:2005 Safety of machinery - Laser processing machines – Part 1: General safety requirements This International Standard describes hazards generated by laser processing machines and specifies safety requirements relating to radiation hazards and hazards generated by materials and substances. It also specifies information to be supplied by manufacturers of such equipment. Not applicable to laser products or equipment manufactured solely for photo lithography, stereolithography, holography, medical applications or data storage. 16 pp.	\$86.00
1400495	ISO/TR 11688-1:1995 Acoustics - Recommended practices for the design of low-noise machinery and equipment - Part 1: Planning This International Technical Report is an aid to understanding the basic concepts of noise control in machinery and equipment. The practice presented is intended to assist designers at any design stage to control the noise of the final product. Reference is made to numerous technical publications dealing with acoustical problems. 25 pp.	\$110.00
1400198	ISO/TR 11688-2:1998 Acoustics - Recommended practice for the design of low-noise machinery and equipment - Part 2: Introduction to the physics of low-noise design This Technical Report provides the physical background for the low-noise design rules and examples given in ISO/TR 11688-1) and supports the use of extensive special literature. It is intended for use by designers of machinery and equipment as well as users and/or buyers of machines and authorities in the field of legislation, supervision or inspection. Equations given herein will improve the general understanding of noise control. In many cases they allow a comparison of different versions of design, but are not useful for the prediction of absolute noise emission values. 51 pp.	\$149.00
1400303	ISO 12100-1:2003 Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology This International Standard defines basic terminology and methodology used in achieving safety of machinery. The provisions stated herein are intended for the designer. It does not deal with damage to domestic animals, property or the environment. 40 pp.	\$129.00
1400709	ISO 12100-1/Amendment 1:2009 Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology - Amendment 1 This amendment revises ISO 12100-1:2003. 6 pp.	\$16.00
1401003	ISO 12100-2:2003 Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles This standard defines technical principles to help designers in achieving safety in the design of machinery.	\$122.00
1400809	ISO 12100-2/Amendment 1:2009 Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles - Amendment 1 This amendment revises ISO 12100-2:2003. 8 pp.	\$16.00
1401209	ISO 12643-1:2009 Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements This part of ISO 12643 provides safety specifications for the design and construction of new equipment used in prepress systems, printing press systems, binding and finishing systems, converting systems and stand-alone platen presses. It is applicable to equipment used in stand-alone mode, or in combination with other machines, including ancillary equipment, in which all the machine actuators (e.g. drives) of the equipment are controlled by the same control system. 81 pp.	\$193.00
1400307	ISO 12643-2:2007 Graphic technology — Safety requirements for graphic technology equipment and systems — Part 2: Press equipment and systems This part of ISO 12643 provides requirements specific to press equipment and systems. Used in conjunction with the general requirements given in ISO 12643-1, it provides additional safety requirements for the design and construction of new press equipment and the auxiliary equipment integrated into the press control system. 44 pp.	\$141.00
1400408	ISO 12643-3:2008 Graphic technology — Safety requirements for graphic technology equipment and systems — Part 3: Binding and finishing equipment and systems This part of ISO 12643 provides requirements specific to binding and finishing equipment and systems. It is intended to be used in conjunction with the general requirements given in ISO 12643-1. 60 pp.	\$157.00
1400110	ISO 12643-4:2010 Graphic technology – Safety requirements for graphic technology equipment and systems – Part 4: Converting equipment and systems This part of ISO 12643 provides safety requirements for the design and construction of converting equipment used in the package printing, converting and graphic technology industries. It is applicable to converting equipment not covered by other parts of ISO 12643. It is intended to be used in conjunction with the general requirements given in ISO 12643-1. 58 pp.	\$147.00
1400606	ISO 13732-1:2006 Ergonomics of the thermal environment – Methods for the assessment of human responses to contact with surfaces – Part 1: Hot surfaces This International Standard provides temperature threshold values for burns that occur when human skin is in contact with a hot solid surface. It also describes methods for the assessment of the risks of burning, when humans could or might touch hot surfaces with their unprotected skin, and give guidance for cases where it may be necessary to specify temperature limit values for hot surfaces. 37 pp.	\$135.00

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1400201	<p>ISO/TS 13732-2:2001 Ergonomics of the thermal environment - Methods for the assessment of human responses to contact with surfaces - Part 2: Human contact with surfaces at moderate temperature This part of ISO/TS 13732 presents principles and methods for predicting thermal sensation and degree of discomfort in cases where parts of the body contact solid surfaces at moderate temperatures. Also deals with thermal sensation for contacts of hands, feet and for sitting position on the floor. 12 pp.</p>	\$73.00
1400806	<p>ISO 13849-1:2006 Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design This part of ISO 13849 provides safety requirements and guidance on the principles for the design and integration of safety-related parts of control systems (SRP/CS), including the design of software. For these parts of SRP/CS, it specifies characteristics that include the performance level required for carrying out safety functions. It applies to SRP/CS, regardless of the type of technology and energy used (electrical, hydraulic, pneumatic, mechanical, etc.), for all kinds of machinery. It provides specific requirements for SRP/CS using programmable electronic system(s). 85 pp.</p>	\$193.00
1400803	<p>ISO 13849-2:2003 Safety of machinery - Safety-related parts of control systems - Part 2: Validation This International Standard specifies the procedures and conditions to be followed for the validation by analysis and testing of the safety functions provided and the category achieved for the safety-related parts of the control system in compliance with EN 954-1 (ISO 13849-1), using the design rationale provided by the designer. This International Standard does not give complete validation requirements for programmable electronic systems and therefore can require the use of other standards. 50 pp.</p>	\$149.00
1401100	<p>ISO/TR 13849-100:2000 Safety of machinery - Safety-related parts of control systems - Part 100: Guidelines for the use and application of ISO 13849-1 This Technical Report provides guidance on the appropriate use and interpretation of ISO 13849-1:1999. It also gives further information on how the control system contributes to reducing risk in the machine; what is meant by the safety-related parts of the control system in relation to safety functions; the proper selection and use of categories; and the role of annex B of ISO 13849-1:1999. 12 pp.</p>	\$49.00
1402296	<p>ISO 13850:2006 Safety of machinery - Emergency stop - Principles for design This International Standard specifies functional requirements and design principles for the emergency stop function on machinery, independent of the type of energy used to control the function. 6 pp.</p>	\$49.00
1400102	<p>ISO 13851:2002 Safety of machinery - Two-hand control devices - Functional aspects and design principles This International Standard specifies the safety requirements of a two-hand control device and the dependency of the output signal from the input signals. It describes the main characteristics of two-hand control devices for the achievement of safety and sets out combinations of functional characteristics for three types. It provides requirements and guidance on the design and selection of two-hand control devices including their assessment, the prevention of defeat and the avoidance of faults. It also provides requirements and guidance for two-hand control devices containing a programmable electronic system. 23 pp.</p>	\$104.00
1402396	<p>ISO 13852:1996 Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs This International Standard establishes values for safety distances to prevent danger zones being reached by the upper limbs of persons of 3 years of age and above. Distances apply when adequate safety can be achieved by distances alone. 10 pp.</p>	\$47.00
1401398	<p>ISO 13853:1998 Safety of machinery - Safety distances to prevent danger zones being reached by the lower limbs This International Standard establishes values for safety distances to prevent access and distances to impede free access to machinery danger zones to prevent their being reached by the lower limbs of persons 14 years of age and above. 6 pp.</p>	\$30.00
1402496	<p>ISO 13854:1996 Safety of machinery - Minimum gaps to avoid crushing of parts of the human body The object of this International Standard is to enable the user (e.g. standard makers, designers of machinery) to avoid hazards from crushing zones. It specifies minimum gaps relative to parts of the human body and is applicable when adequate safety can be achieved by this method. 5 pp.</p>	\$49.00
1401498	<p>ISO 13855:2002 Safety of machinery - Positioning of protective equipment with respect to the approach speeds of parts of the human body This International Standard provides parameters based on values for hand/arm and approach speeds and the methodology to determine the minimum distances from sensing or actuating devices of protective equipment to a danger zone. It does not apply to protective equipment, which is intended to be moved, without tools, nearer to the danger zone than the calculated distance, e.g. pendant two-hand control devices. 19 pp.</p>	\$98.00
1400601	<p>ISO 13856-1:2001 Safety of machinery - Pressure-sensitive protective devices - Part 1: General principles for design and testing of pressure-sensitive mats and pressure-sensitive floors This international standard specifies requirements for pressure-sensitive mats and floors normally actuated by the feet, for use as safety devices to protect persons from dangerous machinery. The minimum safety requirements for the performance, marking and documentation are given. It deals with pressure-sensitive mats and floors, regardless of type of energy used, and designed to detect persons weighing more than 35 kg and persons weighing more than 20 kg. 42 pp.</p>	\$141.00
1400905	<p>ISO 13856-2:2005 Safety of machinery – Pressure-sensitive protective devices – Part 2: General principles for the design and testing of pressure-sensitive edges and pressure-sensitive bars This part of ISO 13856 specifies the general principles and requirements for the design and testing of pressure-sensitive edges and pressure-sensitive bars for use as safety devices and not as actuating devices for normal operation. It is applicable to pressure-sensitive edges and pressure-sensitive bars, with or without an external reset facility, used to detect persons or parts of persons who may be exposed to danger such as hazardous moving parts. Its purpose relates primarily to safety and reliability rather than suitability. 51 pp.</p>	\$157.00

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1400508	<p>ISO 13857:2008 Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs This International Standard establishes values for safety distances in both industrial and non-industrial environments to prevent machinery hazard zones being reached. The safety distances are appropriate for protective structures. It also gives information about distances to impede free access by the lower limbs. (This standard replaces ISO 13852 and ISO 13853) 17 pp.</p>	\$92.00
1403297	<p>ISO 14118:2000 Safety of machinery - Prevention of unexpected start-up This International Standard specifies built-in safety measures aimed at preventing unexpected machine start-up to allow safe human interventions in hazard zones. 13 pp.</p>	\$80.00
1402598	<p>ISO 14119:1998 Safety of machinery - Interlocking devices associated with guards - Principles for design and selection This International Standard specifies principles for the design and selection, independent of the nature of the energy source, of interlocking devices associated with guards. 42 pp.</p>	\$141.00
1400507	<p>ISO 14119:1998/Amendment 1:2007 Safety of machinery - Interlocking devices associated with guards - Principles for design and selection – Amendment 1: Design to minimize defeat possibilities This Amendment to ISO 14119 completely revises the requirements of ISO 14199 relating to requirements for the design of guard interlocks to minimize the possibility of defeating the interlocks. 5 pp.</p>	\$16.00
1400302	<p>ISO 14120:2002 Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards This International Standard specifies general requirements for the design and construction of guards provided primarily to protect persons from mechanical hazards. It applies primarily to machines, which will be manufactured after it is published. The requirements are applicable if a fixed and movable guard are used, but does not cover guards, which actuate interlocking devices. It does not provide requirement for special systems relating specifically to mobility or to the ability to lift loads. 26 pp.</p>	\$110.00
1400707	<p>ISO 14121-1:2007 Safety of machinery – Risk assessment - Principles This part of ISO 14121 establishes general principles intended to be used to meet the risk reduction objectives established in ISO 12100-1. These principles of risk assessment bring together knowledge and experience of the design, use, incidents, accidents and harm related to machinery in order to assess the risks posed during the relevant phases of the life cycle of a machine. It provides guidance on the information that will be required to enable risk assessment to be carried out. Procedures are described for identifying hazards and estimating and evaluating risk. It also gives guidance on the making of decisions relating to the safety of machinery and on the type of documentation required to verify the risk assessment carried out. 28 pp.</p>	\$116.00
1400301	<p>ISO 14122-1:2001 Safety of machinery - Permanent means of access to machinery - Part 1: Choice of fixed means of access between two levels This part of ISO 14122 applies to all machinery (stationary and mobile) where fixed means of access are necessary. It advises on the correct choice of access means when the necessary access to the machine is not possible directly from the ground level or from a floor. Applies to access means which are a part of a machine; means of access specific to the machine which are not permanently fixed to the machine; and may apply to means of access which are part of the building. Not applicable to devices specifically designed to lift persons between two levels. 9 pp.</p>	\$65.00
1400501	<p>ISO 14122-2:2001 Safety of machinery - Permanent means of access to machinery - Part 2: Working platforms and walkways This International Standard applies to all machinery (stationary and mobile) where fixed means of access are necessary. It applies to working platforms and walkways which are a part of a machine; are specific to the machine which are not permanently fixed to the machine; and may apply to working platforms and walkways to part of the building where the machine is installed. Not applicable to devices specifically designed to lift persons between two levels. 8 pp.</p>	\$57.00
1400401	<p>ISO 14122-3:2001 Safety of machinery - Permanent means of access to machinery - Part 3: Stairs, stepladders and guard-rails This International Standard applies to all machinery (stationary and mobile) where fixed means of access are necessary. Applies to stairs, step ladders and guard-rails which are part of machine; are specific to the machine which are not permanently fixed to the machine; and may apply to stairs, stepladders and guard-rails to part of the building where the machine is installed. 14 pp.</p>	\$80.00
1401104	<p>ISO 14122-4:2004 Safety of machinery —Permanent means of access to machinery — Part 4: Fixed ladders This standard applies to all machinery (stationary and mobile) where fixed means of access are necessary. 37 pp.</p>	\$116.00
1401598	<p>ISO 14123-1:1998 Safety of machinery - Reduction of risks to health form hazardous substances emitted by machinery - Part 1: Principles and specifications for machinery manufacturers This part of ISO 14123 deals with principles for the control of risks to health due to hazardous substances from machinery. This part of ISO 14123 is not applicable to substances, which are a hazard to health solely because of their explosive, flammable or radioactive properties or their behavior at extremes of temperature or pressure. 9 pp.</p>	\$65.00
1401698	<p>ISO 14123-2:1998 Safety of machinery - Reduction of risks to health form hazardous substances emitted by machinery - Part 2: Methodology leading to verification procedures This part of ISO 14123 defines a procedure which leads to the selection of critical factors relating to emissions of hazardous substances for the purpose of specifying suitable verification procedures. This part of ISO 14123 is intended to be used in conjunction with ISO 14123-1 and relates specifically to clause 8 of that standard. 6 pp.</p>	\$49.00

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1400700	ISO 15534-1:2000 Ergonomic design for the safety of machinery - Part 1: Principles for determining the dimensions required for openings for whole-body access into machinery This part of ISO 15534 specifies the dimensions of openings for whole-body access into machinery as defined in ISO/TR 12100-1. It provides the dimensions to which the values given in ISO 15534-3 are applicable. It has been prepared primarily for non-mobile machinery; there may be additional specific requirements for mobile machinery. This part of ISO 15534 shows how to combine the anthropometric data with suitable allowances to take these factors into account. Situations where people are to be prevented from reaching a hazard are dealt with in ISO 13852. 12 pp.	\$73.00
1400800	ISO 15534-2:2000 Ergonomic design for the safety of machinery - Part 2: Principles for determining the dimensions required for access openings This part of ISO 15534 specifies the dimensions of openings for access into machinery as defined in ISO/TR 12100-1. It provides the dimensions to which the values given in ISO 15534-3 are applicable. It has been prepared primarily for non-mobile machinery; there may be additional specific requirements for mobile machinery. This part of ISO 15534 shows how to combine the anthropometric data with suitable allowances to take these factors into account. Situations where people are to be prevented from reaching a hazard are dealt with in ISO 13852. 23 pp.	\$104.00
1400900	ISO 15534-3:2000 Ergonomic design for the safety of machinery - Part 3: Anthropometric data This part of ISO 15534 specifies current requirements for human body measurements (anthropometric data) that are required by ISO 15534-1 and ISO 15534-2 for the calculation of access-opening dimensions as applied to machinery. The data are based on information from anthropometric surveys representative of population groups within Europe comprising at least three million people; both men and women. Measurements meet the requirements of ISO 15534-1 and ISO 15534-2. 4 pp.	\$43.00
1401008	ISO/TR 15847:2008 Graphic technology – Graphical symbols for printing press systems and finishing systems, including related auxiliary equipment This Technical Report defines graphical symbols for use on or near equipment in printing systems and finishing systems, including related auxiliary equipment. These graphical symbols are intended for use on equipment controls, including pushbuttons, touchscreens, keypads, etc.	\$180.00
IEC Standards <i>(These publications are also available from ISO/IEC member bodies)</i>		
1500190	IEC 60050-161:1990, Ed. 1.0 [formerly (IEC 50(161)] International Electrotechnical Vocabulary - Chapter 161: Electromagnetic compatibility This standard contains terms and definitions relating to electro-magnetic compatibility. English/French/Russian. 73 pp.	\$147.00
1500297	IEC 60050-161, Amd1, Ed 1.0 b:1997 Update to IEC 60050-161:1990. English/French/Russian. 20 pp.	\$46.00
1500198	IEC 60050-161, Amd2, Ed 1.0 b: 1998 Second update to IEC 60050-161:1990. English/French/Russian. 20 pp.	\$52.00
1500287	IEC 60050-845:1987, Ed. 1.0 International Electrotechnical Vocabulary – Lighting	\$286.00
1501407	IEC 60079-0:2007, Ed. 5.0 Electrical apparatus for explosive gas atmospheres - Part 0: General Requirements This part of IEC 60079 specifies the general requirements for construction, testing and marking of electrical apparatus and Ex components intended for use in explosive gas atmospheres. French/English. 94 pp.	\$260.00
1501107	IEC 60079-1:2007, Ed. 6.0 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" This part of IEC 60079 contains specific requirements for the construction and testing of electrical apparatus with the type of protection flameproof enclosure "d", intended for use in explosive gas atmospheres. French/English. 147 pp.	\$235.00
1500207	IEC 60079-2 Ed. 5.0 b:2007 Electrical apparatus for explosive gas atmospheres - Part 2: Pressurized enclosures "p" This part of IEC 60079 contains the specific requirements for the construction and testing of electrical apparatus with pressurized enclosures, of type of protection "p", intended for use in explosive gas atmospheres. It specifies requirements for pressurized enclosures containing a limited release of a flammable substance. It supplements and modifies the general requirements of IEC 60079-0. Where a requirement of this standard conflicts with a requirement of IEC 60079-0, the requirements of this standard takes precedence. English/French. 111 pp.	\$204.00
1500807	IEC 60079-5, Ed. 3.0 b:2007 Explosive atmospheres - Part 5: Equipment protection by powder filling "q" This part of IEC 60079 contains specific requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components in the type of protection powder filling "q", intended for use in explosive gas atmospheres. Supplement to IEC 60079-0. English/French. 42 pp.	\$107.00
1500707	IEC 60079-6 Ed. 3.0 b:2007 Explosive atmospheres - Part 6: Equipment protection by oil immersion "o" This part of IEC 60079 specifies the requirements for the construction and testing of oil-immersed electrical equipment, oil-immersed parts of electrical equipment and Ex components in the type of protection oil immersion "o", intended for use in explosive gas atmospheres. It is applicable to electrical apparatus and parts of electrical apparatus, which are not ignition capable in normal operation. It is a supplement to IEC 60079-0. English/French. 31 pp.	\$77.00
1501001	IEC 60079-7:2001, Ed. 3.0 Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety "e" This standard gives requirements for the design, construction, testing and marking of electrical apparatus, with a rated value of supply voltage not exceeding 11 kV r.m.s. a.c. or d.c., with type of protection 'e' that does not produce sparks, arcs, or dangerous temperatures in normal operation. English/French. 129 pp.	\$232.00
1500102	IEC 60079-10:2002, Ed. 4.0 Electrical apparatus for explosive gas atmospheres - Part 10: Classification of hazardous areas This standard specifies the classification of hazardous areas where flammable gas or vapour risks may arise, in order to permit the proper selection and installation of apparatus for use in such hazardous areas. English/French 115 pp.	\$204.00

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1500406	<p>IEC 60079-11:2006, Ed. 5.0 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" This part of IEC 60079 specifies the construction and testing of intrinsically safe apparatus intended for use in an explosive gas atmosphere and for associated apparatus, which is intended for connection to intrinsically safe circuits which enter such atmospheres. This type of protection is applicable to electrical apparatus in which the electrical circuits themselves are incapable of causing an explosion in the surrounding explosive atmospheres. English/French. 233 pp.</p>	\$265.00
1501209	<p>IEC 60079-18:2009, Ed. 3.0 Explosive atmospheres -- Electrical apparatus for explosive gas atmospheres – Part 18: Equipment protection by encapsulation "m" This part of IEC 60079 gives the specific requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components with the type of protection encapsulation "m" intended for use in explosive gas atmospheres or explosive dust atmospheres. This package includes a corrigendum. Available as a zip file.</p>	\$143.00
1500309	<p>IEC 60204-1:2009, Ed. 5.1 Safety of machinery-Electrical equipment of machines - Part 1: General requirements This part of IEC 60204 applies to the application of electrical and electronic and programmable electronic equipment and systems to machines not portable by hand while working, including a group of machines working together in a coordinated manner. English/French. 244 pp.</p>	\$326.00
1500601	<p>IEC 60529:2001, Ed. 2.1 Degrees of protection provided by enclosures (IP Code) This standard applies to the classification of degrees of protection provided by enclosures for electrical equipment with a rated voltage not exceeding 72,5 kV. This package includes 3 corrigendum. Available as a zip file. English/French. 100 pp.</p>	\$204.00
1500907	<p>IEC 60825-1:2007, Ed. 2.0 Safety of laser products - Part 1: Equipment classification and requirements This standard applies to safety of laser products emitting laser radiation in the wavelength range 180 nm to 1 mm. English/French. 195 pp.</p>	\$260.00
1501207	<p>IEC 60947-1:2007, Ed. 5.0b Low-voltage switchgear and controlgear - Part 1: General rules This standard applies, when required by the relevant product standard, to switchgear and controlgear and intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c. English/French. 452 pp.</p>	\$291.00
1500306	<p>IEC 60947-2:2006, Ed. 4.0 Low-voltage switchgear and controlgear - Part 2: Circuit-breakers This standard applies to circuit-breakers, the main contacts of which are intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c.; it also contains additional requirements for integrally fused circuit-breakers. English/French. 434 pp.</p>	\$291.00
1500209	<p>IEC 60947-2, Amd1, Ed. 4.0 b: 2009 This amendment revises IEC 60947-2 Ed. 4.0 b:2006. English/French. 57 pp.</p>	\$128.00
1501109	<p>IEC 60947-2:2009 Ed 4.1b Low-voltage switchgear and controlgear – Part 2: Circuit-breakers This standard revises IEC 60947-2 Ed. 4.0 b:2006. The main changes introduced in this edition are an amendment to the verification of dielectric properties, the improvement of EMC clauses in Annexes B, F, J and M, and the addition of a new Annex O regarding instantaneous trip circuit-breakers. English/French 462 pp.</p>	\$388.00
1500409	<p>IEC 60947-3:2008, Ed 3.0 Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units This part of IEC 60947 applies to switches, disconnectors, switch-disconnectors and fuse-combination units to be used in distribution circuits and motor circuits of which the rate voltage does not exceed 1 000 V a.c. or 1 500 V d.c. 120 pp.</p>	\$204.00
1501409	<p>IEC 60947-4-1:2009, Ed. 3.0 Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters This part of IEC 60947 applies to the types of equipment listed in 1.1.1 and 1.1.2 whose main contacts are intended to be connected to circuits the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c. English/French. 250 pp.</p>	\$270.00
1500307	<p>IEC 60947-4-2 Ed. 2.2b:2007 Low-voltage switchgear and controlgear - Part 4-2: Contactors and motor-starters - AC semiconductor motor controllers and starters This standard applies to controllers and starters, which may include a series mechanical switching device, intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V a.c. This standard characterizes controllers and starters with and without bypass means. English/French. 195 pp.</p>	\$306.00
1501309	<p>IEC 60947-5-1:2009, Ed. 3.1 Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices This part of IEC 60947 applies to control circuit devices and switching elements intended for controlling, signaling, interlocking, etc., of switchgear and controlgear. English/French 192 pp.</p>	\$306.00
1500709	<p>IEC 60947-5-1:2009-Amd1 Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices This amendment updates IEC 60947-5-1:2009. English/French. 32 pp.</p>	\$66.00
1501507	<p>IEC 60947-5-2:2007, Ed. 3.0 Low-voltage switchgear and controlgear - Part 5-2: Control circuit devices and switching elements - Proximity switches This standard applies to inductive and capacitive proximity switches that sense the presence of metallic and/or non-metallic objects, ultrasonic proximity switches that sense the presence of sound reflecting objects and photoelectric proximity switches that sense the presence of objects. English/French. 102 pp.</p>	\$260.00
1500402	<p>IEC 60947-5-4:2002, Ed. 2.0 Low-voltage switchgear and controlgear - Part 5-4: Control circuit devices and switching elements - Methods of assessing the performance of low-energy contacts - Special tests This part of IEC 60947 applies to separable contacts used in the utilization area considered such as switching element for control circuits. English/French. 49 pp.</p>	\$117.00

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1500305	<p>IEC 60947-5-5:2005, Ed. 1.1 Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function This part of IEC 60947-5 provides detailed specifications relating to the electrical and mechanical construction of emergency stop devices with mechanical latching function and to their testing. English/French. 29 pp.</p>	\$112.00
1500605	<p>IEC 60947-6-1:2005, Ed. 2.0 Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment- Transfer switching equipment This standard applies to Automatic Transfer Switching Equipment (ATSE) to be used in emergency power systems with interruption of the supply to the load during transfer, the rated voltage of which does not exceed 1,000 V a.c. or 1,500 V d.c. It covers ATSE provided with or without an enclosure. English/French. 85 pp.</p>	\$179.00
1501007	<p>IEC 60947-6-2:2007, Ed. 2.1 Low-voltage switchgear and controlgear - Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS) This part of IEC 60947-6 applies to control and protective switching devices (or equipment) (CPS), the main contacts of which are intended to be connected to circuits of rated voltage not exceeding 1 000 V a.c. or 1 500 V d.c. English/French. 251 pp.</p>	\$326.00
1500809	<p>IEC 60947-7-1:2009, Ed. 3.0 Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors This part of IEC 60947 specifies requirements for terminal blocks with screw-type or screwless-type clamping units primarily intended for industrial or similar use and to be fixed to a support to provide electrical and mechanical connection between copper conductors. English/French. 72 pp.</p>	\$143.00
1500909	<p>IEC 60947-7-2:2009, Ed. 3.0 Low-voltage switchgear and controlgear - Part 7-2: Ancillary equipment - Protective conductor terminal blocks for copper conductors This part of IEC 60947 specifies requirements for protective conductor terminal blocks with PE function up to 120 mm² (250 kcmil) and for protective conductor terminal blocks with PEN function equal to and above 10 mm² (AWG 8) with screw-type or screwless-type clamping units, primarily intended for industrial applications. English/French. 42 pp.</p>	\$97.00
1500301	<p>IEC 61010-1:2001, Ed. 2.0 Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements This standard specifies general safety requirements for electrical equipment intended for professional, industrial process, and educational use, which may incorporate computing devices: electrical test and measurement equipment; electrical control equipment; electrical laboratory equipment; or accessories intended for use with them, used under specified environmental conditions. English/French. 231 pp.</p>	\$265.00
1500703	<p>IEC 61131-1:2003, Ed. 2.0 Programmable controllers –Part 1: General information This Part of IEC 61131 applies to programmable controllers (PLC) and their associated peri-pherals such as programming and debugging tools (PADTs), human-machine interfaces(HMIs), etc., which have as their intended use the control and command of machines and industrial processes. English/French. 24 pp.</p>	\$97.00
1500803	<p>IEC 61131-2:2003, Ed. 2.0 Programmable controllers –Part 2: Equipment requirements and tests This Part of IEC 61131 specifies requirements and related tests for programmable controllers (PLC) and their associated peripherals (for example., programming and debugging tools (PADTs), human-machine interfaces (HMIs), etc.) which have as their intended use the control and command of machines and industrial processes. English/French. 122 pp.</p>	\$270.00
1500208	<p>IEC 61131-3:2003, Ed. 2.0 Programmable controllers – Part 3: Programming languages This part of IEC 61131 specifies syntax and semantics of programming languages for <i>programmable controllers</i> as defined in Part 1 of IEC 61131. 226 pp.</p>	\$291.00
1500504	<p>IEC/TR 61131-4:2004, Ed. 2.0 Programmable controllers – Part 4: User guidelines The object of this Technical report is to introduce the end-users of Programmable Controller (PLC) to the IEC 61131 series, and to assist the end-users in their selection and specification of their PLC equipment according to the IEC 61131 series. This user guideline has as its main audience PLC end-users. English/French. 136 pp.</p>	\$270.00
1500903	<p>IEC 61131-5:2003, Ed. 1.0 Programmable controllers –Part 5: Communications This part of IEC 61131 specifies communication aspects of a programmable controller. It specifies from the viewpoint of a PC how any device can communicate with a PC as a server and how a PC can communicate with any device. In particular, it specifies the behavior of the PC as it provides services on behalf of other devices and the services the PC application program can request from other devices. English/French. 106 pp.</p>	\$260.00
1500308	<p>IEC 61131-7:2000, Ed. 1.0 Programmable controllers – Part 7: Fuzzy control programming This part of IEC 61131 defines a language for the programming of Fuzzy Control applications. The object is to offer the manufacturer and the user a well-defined common understanding of the basic means to integrate fuzzy control applications in the Programmable Controller languages according to IEC 61131-3, as well as the ability to exchange portable fuzzy control programs among different programming systems. English/French. 122 pp.</p>	\$204.00
1500408	<p>IEC 61131-8:2003 Ed.2.0 Programmable controllers – Part 8: Guidelines for the application and implementation of programming languages This part of IEC 61131, which is a technical report, applies to the programming of programmable controller systems using the programming languages defined in IEC 61131-3. It also provides guidelines for the implementation of these languages in programmable controller systems and their programming support environments (PSEs). 112 pp.</p>	\$260.00
1500407	<p>IEC 61310-1 Ed. 2.0b:2007 Safety of Machinery - Indication, Marking and Actuation - Part 1: Requirements for visual, auditory, and tactile signals This part of IEC 61310 specifies requirements for visual, acoustic and tactile methods of indicating safety-related information, at the human-machine interface and to exposed persons. It specifies a system of colours, safety signs, markings and other warnings, intended for use in the indication of hazardous situations and health hazards and for meeting certain emergencies. It also specifies ways of coding visual, acoustic and tactile signals for indicators and actuators to facilitate the safe use and monitoring of the machinery. English/French. 43 pp.</p>	\$107.00

PRODUCT CODE	STANDARD DESCRIPTION	PRICE
1500507	<p>IEC 61310-2 Ed. 2.0b:2007 Safety of Machinery - Indication, Marking and Actuation - Part 2: Requirements for marking This part of IEC 61310 specifies requirements for the marking of machinery. It gives general rules on marking for identification of machinery, for safe use related to mechanical and electrical hazards, and for the avoidance of hazards arising from incorrect connections. English/French. 25 pp.</p>	\$57.00
1500607	<p>IEC 61310-3 Ed. 2.0b:2007 Safety of Machinery - Indication, Marking and Actuation - Part 2: Requirements for the location and operation of actuators This part of IEC 61310 specifies safety-related requirements for actuators, operated by the hand or by other parts of the human body, at the human-machine interface. It gives general requirements for the standard direction of movement for actuators, the arrangement of an actuator in relation to other actuators, and the correlation between an action and its final effects. English/French. 25 pp.</p>	\$61.00
1500702	<p>IEC 61491:2002, Ed. 2.0 Electrical equipment of industrial machines – Serial data link for real-time communication between controls and drives This International Standards defines a real-time optical serial interface between the control unit and its associate drives which is used to transmit periodic and non periodic data. The interface applies to industrial machines with multiple drives and can be operated in torque, velocity, or position interface operation modes. English/French. 543 pp.</p>	\$301.00
1501509	<p>IEC 61496-1:2008, Ed. 2.1 Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests This part of IEC 61496 specifies general requirements for the design; construction and testing of non-contact electro-sensitive protective equipment (ESPE) designed specifically to detect persons as part of a safety related system. Special attention is directed to functional and design requirements that ensure an appropriate safety-related performance is achieved. An ESPE may include optional safety-related functions, the requirements for which are given in Annex A. This package includes a corrigendum. Available as a zip file. English/French. 109 pp.</p>	\$230.00
1500106	<p>IEC 61496-2:2006, Ed. 2.0 Safety of machinery - Electro-sensitive protective equipment - Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) This part of IEC 61496 specifies requirements for the design, construction and testing of electro-sensitive protective equipment (ESPE) designed specifically to detect persons as part of safety-related system, employing active opto-electronic protective devices (AOPDs) for the sensing function. English/French. 98 pp.</p>	\$179.00
1502998	<p>IEC 61508-3:1998, Ed. 1.0 Functional safety of electrical/ electronic/ programmable electronic safety-related systems - Part 3: Software requirements This part of IEC 61508 applies to any software forming part of a safety-related system or used to develop a safety-related system. English/French. 95 pp.</p>	\$178.00
1500609	<p>IEC/TS 62046:2008, Ed. 2.0 b Safety of machinery – Application of protective equipment to detect the presence of persons This Technical Specification specifies requirements for the selection, positioning, configuration and commissioning, of protective equipment to detect the presence of persons in order to protect those persons from dangerous part(s) of machinery in industrial applications. English /French. 216 pp.</p>	\$265.00
1500805	<p>IEC 62061:2008, Ed. 1.0 b Safety of machinery – Functional safety of safety-related electrical, electronic and programmable electronic control systems This International Standard specifies requirements and makes recommendations for the design, integration and validation of safety-related electrical, electronic and programmable electronic control systems (SRECS) for machines. It is applicable to control systems used, either singly or in combination, to carry out safety-related control functions on machines that are not portable by hand while working, including a group of machines working together in a coordinated manner. English/French. 215 pp.</p>	\$260.00