Type of supply system	Benefits	Disadvantages
SELV or PELV (safety extra-low voltage or protective extra low voltage)	• No hazard potential on contact	• Limited power if deployment of equipment is to be cost-effective • Specific requirements on current circuits
Protective insulation	• Can be combined with other types of system • Double insulation of equipment	• Only cost-effective for small loads • Insulating material pose fire hazard on thermal loads
IT system	• EMC friendly • Increased availability: 1st fault is simply reported Disconnection in the event of a 2nd fault • Low ground leakage current in small systems • Influence on neighboring installations is reduced, this in turn makes grounding easier • Little technical effort for cable and conductor installation • Use of appropriate devices facilitates fault location	• Equipment has to be insulated universally for the voltage between external conductors. • An overvoltage protective device is required for N conductors • Potential problems with going offline on second ground fault

TT system	• EMC friendly • Protection is dependent on the system's short circuit power • Little technical effort for cable and conductor installation • Touch voltage can vary from one area to another • Can be combined with a TN system	• Only compatible with low power ratings due to the use of GFCIs • Regular functional test required • Operational grounding is complex (≤ 2 Ω). • Equipotential bonding compulsory for every building
TN-C system	• Easy to set up • Low material expenses	• Not EMC friendly • Building stray currents and low frequency magnetic fields make the system incompatible for use in buildings housing information technology equipment • Risk to life and limb in the event of PEN break • Increased risk of electrical fires
TN-C-S system	• A cost-effective compromise for buildings which do not house information technology equipment.	• Not EMC friendly • Low-frequency magnetic fields possible
TN-S system	• EMC friendly • Low voltage rise in the healthy phases	• Increased safety engineering outlay for remote multiple infeeds • Risk of multiple grounding going unnoticed

Criterion			TT	TN-C	TN-S	IT
Safety of persons			***	***	***	***
Safety against fire hazard			***	*	**	***
Machine protection			***	*	*	***
Availability			**	**	**	****
Electromagnetic compatibility			**	*	**	***
Maintenance			**	****	****	***
Installation			*	**	**	***
Overall result			16	14	16	22
*	Weak					
**	Average					
***	Good					
****	Excellent					