CONSTRUCTION PRODUCTS REGULATION
AT RADIO FREQUENCY SYSTEMS

revision date 11/08/2020

SAFETY IS KEY

GENERAL INFORMATION

When does CPR apply?

- 1 July 2017

What does CPR imply?

- Cables placed on the market as construction products must comply with Regulation No. 305/2011 [1] of the European Union
- CPR regulates the requirements on cables in terms of their reaction to fire
- The regulations pertain to cables that are permanently installed in construction works (both above and below ground level)

What countries require CPR?

- All countries in the European Union are requested to convert into national regulations
- Other countries will adopt the regulations (example Switzerland)

Why is CPR required?

- The LSZH certification is no longer considered as comprehensive to measure the fire safety performance of cables.
- CPR provides a harmonized set of standards so product purchasers can easily confirm that cables meet the more stringent fire safety requirements in **European standard EN 50575**.

RFS products will be classified according to the following indicators in compliance with the European Union CPR requirements.

CLASSIFICATION

| CLASS | CLASSIFICATION CRITERIA | | | | | FIRE SAFETY |
	Flame spread (EN 50399)	Total heat release	Peak heat release	Fire growth rate	Flame spread (EN 60332-1-2)	
B2ca	≤ 1,5m	≤ 15 MJ	≤ 30 kW	≤ 150 Ws-1	≤ 425 mm	+++
Cca	≤ 2,0m	≤ 30 MJ	≤ 40 kW	≤ 300 Ws-1		++
Dca		≤ 70MJ	≤ 400 kW	≤ 1300 Ws-1		+
Eca	Minimum fire performance classification					--
Fca	Not advisable for public places				> 425 mm	---

A and B1 are not applicable to LSZH data and telecommunication cables
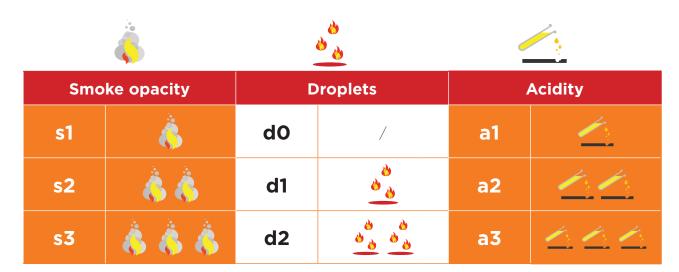
EURO CLASS REQUIRED FOR ENVIRONMENT

Environment	Country A	Country B	Country C
Airports	Cca	B2ca	Cca
Hospitals	B2ca	B2ca	Cca
Commercial Premises	Cca	Cca	Dca
Residential Building	Fca	Dca	Eca

Classification requirements subject to local law.

EUROPEAN CLASS CODE LABELING EXAMPLES

B2	ca	s1	d0	a1
Fire Performance class	Application to cable	Smoke ratio	Droplets rating	Acidity rating

e.g. our CPR feeders

Smoke opacity		Droplets		Acidity	
s1		d0	/	a1	
s2		d1		a2	
s3		d2		a3	

Cable Type	CPR Class	Current Status	Product Availability
CELLFLEX Feeder Cables			
New family, CPR feeders			
SCF12-50CPR	B2ca s1a d0 a1	confirmed	available now
LCF12-50CPR	B2ca s1a d0 a1	confirmed	available now
LCF78-50CPR	B2ca s1a d0 a1	confirmed	available now
LCFS114-50CPR	B2ca s1b d0 a1	confirmed	available now
LCF158-50CPR	Cca s1a d0 a1	confirmed	available now
Existing JFN feeder types			
LCF14-50JFN	B2ca s1a d1 a1	confirmed	available now
SCF38-50JFN	B2ca s1a d0 a1	confirmed	available now
SCF12-50JFN	B2ca s1a d0 a1	confirmed	available now
LCF12-50JFN	B2ca s1a d0 a1	confirmed	available now
LCF78-50JFNA	B2ca s1a d0 a1	confirmed	available now
LCFS114-50JFNA	B2ca s1b d2 a1	confirmed	available now
LCF158-50JFNA	Cca s1a d2 a1	confirmed	available now
Existing J feeder types			
All SCF/LCF jacket option «J»	F, not classified since none of the CPR classes «A» to «E» will be met	confirmed	available now

Cable Type	CPR Class	Current Status	Product Availability
RADIAFLEX Radiating Cables			
New family, CPR radiating cables			
RLK, ALF types 1/2"	B2ca s1a d0 a1	confirmed	available now
RLK, RLF, RAY types 7/8"	B2ca s1a d0 a1	confirmed	available now
RLK, RLF, RAY types 1-1/4"	B2ca s1b d0 a1	confirmed	available now
RLK, RLF, RAY types 1-5/8"	B2ca s1a d0 a1	confirmed	available now
Existing JFL radiating cables			
RLK, ALF types 1/2"	Cca s1a d0 a1	confirmed	available now
RLK, RLF, RAY types 7/8"	Dca s1b d2 a1	confirmed	available now
RLK, RLF, RAY types 1-1/4"	Dca s1 d2 a1	confirmed	available now
RLK, RLF, RAY types 1-5/8"	Cca s1b d1 a1	confirmed	available now
Existing JFN radiating cables			
RE60 radiating waveguide	Cca s1 d2 a1	confirmed	available now
RLK, ALF types 1/2"	Cca s1a d1 a1	confirmed	available now
RLK, RLF, RAY types 7/8"	Dca s1b d2 a1	confirmed	available now
RLK, RLF, RAY types 1-1/4"	Dca s1 d2 a1	confirmed	available now
RLK, RLF, RAY types 1-5/8"	Dca s2 d2 a1	confirmed	available now