

## WATT 6B15.20

**SB P SRC FO E WR WRU HRO \***

\* Tested and approved at a voltage of 18000V at 60 Hz for one minute according to **ASTM F2413-18** American standard.



### LINING SYMPATEX

Waterproof membrane which absorbs the water vapor and removes it through the lining to the outside.

### INSOCK INSULATING PU

Specially developed for those who work with electricity.

### Q-FLEX & CORK INSOLE

Anti-perforation and anti-static

### MATERIAL NUBUCK LEATHER

Soft treated, with excellent transpiration characteristics that significantly increases the level of comfort. Excellent resistance and durability.

### TOE CAP CARBONLIGHT

Non-metallic and ultra-light composite toe cap that protects the toes against pressure up to 200 joules.

### TOE REINFORCEMENT

Extra protection and resistance.

### NITRILE RUBBER

### SOLE FUSION - Width: 11 cm

Extremely soft and comfortable PU midsole in combination with a special insulating Nitrile Rubber outsole against electrostatic discharges.



COMPOSITE TOE CAP



COMPOSITE INSOLE



WATERPROOF



METAL FREE



ELECTRICAL HAZARD PROTECTION

## NORMS EN ISO 20345:2011 & ASTM F2413-18

**SB** - Shoe with basic requirements - footwear with toe cap - resistant to 200 Joules

**P** - Penetration resistance sole

**SRC** - Slip resistance against ceramic, Sodium lauryl sulfate, steel and glycerin

**FO** - Resistance to fuel oil of the outsole

**E** - Heel energy absorption

**WR** - Water resistance

**WRU** - Water penetration resistant uppers

**HRO** - Resistance to hot contact of the outsole

## ADVANTAGES

Protects against high voltages | Waterproof | Breathable | Non Metallic  
| Comfortable | Excellent anti-slip features | Sole resists to high temperatures

## WORKING ENVIRONMENT

ELECTRICIANS | RAILWAY WORKERS | POWER DISTRIBUTION WORKERS |  
ENVIRONMENTS WITH HIGH RISK OF ELECTRIC SHOCK

## WATT 6B15.20

### SB P SRC FO E WR WRU HRO \*

\* Tested and approved at a voltage of 18000V at 60 Hz for one minute according to **ASTM F2413-18** American standard.



PAGE 2/2

\* **PROTECTS AGAINST**

## HIGH VOLTAGES

### UP TO 18000 V AT 60 HZ

according to **ASTM F2413-18** American standard

## TECHNICAL INFORMATION

FOOTWEAR MATERIALS	NORM	DESCRIPTION	UNIT	FTG RESULT	EN ISO 20345 REQ.
<b>TOE CAP</b> Non-metallic and ultra-light composite toe cap that protects the toes against pressure up to 200 joules.	<b>5.3.2.3</b>	<b>IMPACT RESISTANCE</b>	mm	<b>17</b>	> = 15
	<b>5.3.2.4</b>	<b>COMPRESSION RESISTANCE</b>	mm	<b>15,0</b>	> = 13,5
<b>UPPER</b> Soft treated Nubuck Leather, with excellent transpiration characteristics that significantly increases the level of comfort. Excellent resistance and durability.	<b>5.4.6</b>	<b>WATER VAPOUR PERMEABILITY</b>	mg/cm <sup>2</sup>	<b>9,7</b>	> = 0,8
		<b>COEFFICIENT OF PERMEABILITY</b>	mg/cm <sup>2</sup>	<b>83,4</b>	> = 15
	<b>5.4.3</b>	<b>TEARING STRENGTH</b>	N	<b>321</b>	> = 120
	<b>6.3</b>	<b>PERMEABILITY &amp; WATER ABSORPTION (TRANSMITED WATER AFTER 60 MIN.)</b>	g	<b>0</b>	max. 0,2
		<b>PERMEABILITY &amp; WATER ABSORPTION (ABSORBED WATER AFTER 60 MIN.)</b>	%	<b>4,5</b>	max. 30
<b>VAMP LINING</b> SYMPATEX - Waterproof membrane which absorbs the water vapor and removes it through the lining to the outside.	<b>5.5.3</b>	<b>WATER VAPOUR PERMEABILITY</b>	mg/cm <sup>2</sup>	<b>4,3</b>	> = 2
		<b>COEFFICIENT OF PERMEABILITY</b>	mg/cm <sup>2</sup>	<b>35</b>	> = 20
	<b>5.5.1</b>	<b>TEARING STRENGTH</b>	N	<b>21</b>	> = 15
	<b>5.5.2</b>	<b>ABRASION RESISTANCE (DRY)</b>	cycles	<b>no rupture</b>	51.200
		<b>ABRASION RESISTANCE (WET)</b>	cycles	<b>no rupture</b>	25.600
<b>COLLAR LINING</b> POROMAX - Removes hot moist air and facilitates uniform temperature inside the shoe.	<b>5.5.1</b>	<b>ABRASION RESISTANCE (DRY)</b>	cycles	<b>no rupture</b>	25.600
	<b>5.5.2</b>	<b>ABRASION RESISTANCE (WET)</b>	cycles	<b>no rupture</b>	12.800
<b>ELECTRICAL RESISTANCE (EH)</b> The shoes capacity to withstand high voltages.	<b>ASTM F2413-18</b>	<b>ELECTRIC HAZARD</b>	V	<b>withstands</b>	18000 V at 60 Hz for one minute
<b>INSOLE</b> QFLEX non-metallic and anti static.	<b>6.2.1.1</b>	<b>PERFORATION RESISTANCE</b>	N	<b>no perforation</b>	> = 1.100
<b>SHOCK ABSORPTION</b> The shoes capacity to absorb the walking impact.	<b>6.2.4</b>	<b>SHOCK ABSORPTION</b>	J	<b>81 / 84</b>	min. 20
<b>SOLE</b> Extremely soft and comfortable PU midsole, which ensures excellent return impact energy, comfort for prolonged use, in combination with a special insulating Nitrile Rubber outsole against electrostatic discharges, which provides great grip and protection against high temperatures.	<b>5.8.2</b>	<b>TEARING STRENGTH</b>	N/mm	<b>15</b>	> = 8
	<b>5.8.3</b>	<b>ABRASION RESISTANCE</b>	mm <sup>3</sup>	<b>140</b>	max. 150
	<b>5.8.4</b>	<b>BENDING RESISTANCE</b>	mm	<b>0,3</b>	max. 4
	<b>6.4.1</b>	<b>HEAT RESISTANCE</b>	°C	<b>no damage</b>	soil heating until 300°C up to 1 min.
	<b>5.1.1</b>	<b>SLIP RESISTANCE ON CERAMIC FLOOR WITH WATER AND DETERGENT</b>	flat	<b>0,51</b>	> = 0,32
			heel	<b>0,40</b>	> = 0,28
		<b>SLIP RESISTANCE ON STEEL FLOOR WITH GLYCERINE</b>	flat	<b>0,23</b>	> = 0,18
			heel	<b>0,15</b>	> = 0,13

**SHOE WEIGHT (SIZE 42): 678g**