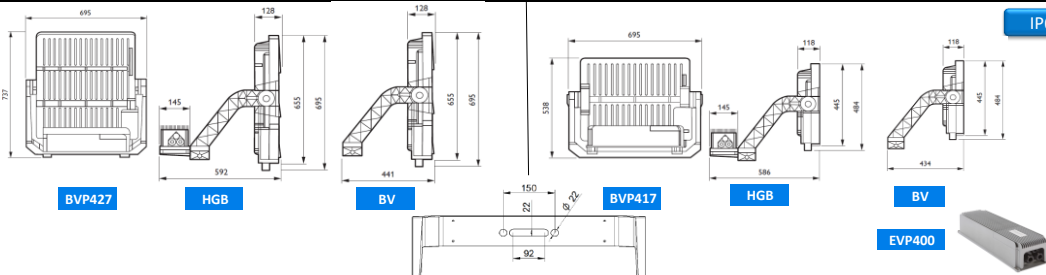FINAL : Feb 2019 CR V0

# Philips ArenaVision LED gen3 floodlighting system

**ArenaVision LED gen3** - data sheet

IP66

**ArenaVision LED gen3**
**LUMINAIRE & DRIVER BOX**

BVP427 | HGB | BV | BVP417 | HGB | BV | EVP400

| | |
|---|---|
| Luminaire types | BVP417 *(2 LED Engines)* / BVP427 *(3 LED Engines)* |
| Luminaire versions | BV: Basic Version *(separate driver box)* / HGB: Housing Gear Box *(driver box pre-fitted on the mounting bracket)* in a Box |
| Driver box type | EVP400 *(DMX-RDM version)* |
| Source light flux (Ta dependent) | Up to 180,000 lm (BVP427; CRI >85) |
| | Up to 195,000 lm (BVP427; CRI >80) |
| | Up to 221,000 lm (BVP427; CRI >70) |
| | Up to 120,000 lm (BVP417; CRI >85) |
| | Up to 130,000 lm (BVP417; CRI >80) |
| | Up to 147,000 lm (BVP417; CRI >70) |
| | *(tolerances on light flux: +/- 7%)* |
| System power | Up to 1578 W (BVP427) / Up to 1052 W (BVP417) |
| | *(tolerances on system power: +/- 10%)* |
| Luminaire efficacy | Up to 120 lm/W *(depends on floodlight's Ta dependent version and CRI)* |
| Correlated Color Temp. (CCT) | Cool White (CW) 5700 K *(tolerances on CCT: +/-400 K)* |
| Color Rendering Index (CRI) | min: 85, typical: 90 / min: 80 / min: 70 |
| TLCI per color code | 85 (957) / 65 (857) / 49 (757) |
| SDCM (MacAdam ellipse) | < 5 |
| Percent flicker factor | < 1% *(Measured with flicker meter ARRI Light Analizer P.R.O.F.)* |
| Light distributions / optics | From 2 x 6° to 2 x 19° / 7 symmetrical optics / 4 Asymmetrical optics |
| Operating temperature range | -40°C up to +45°C *(depends on floodlight's Ta dependent version)* |
| Electrical insulation class | Class I |
| Degree of Ingress Protection | IP66 |
| Luminaire dimensions (LxWxH) | 737 x 695 x 128 mm (BVP427) / 538 x 695 x 118 mm (BVP417) |
| Driver box dimensions (LxWxH) | 500 x 145 x 120 mm |
| Luminaire weight | BVP417 (BV): 22 kg / BVP417 (HGB): 29 kg / BVP427 (BV): 26,5 kg / BVP427 (HGB): 33 kg *(tolerances on weight: +/- 10%)* |
| Driver box weight | 6.3 kg |
| Luminaire windage area (SCx) | BVP417 (BV: 0.10 - 0.34) (HGB: 0.18 - 0.33) / BVP427 (BV: 0.12 - 0.48 ) (HGB: 0.20 - 0.47) |
| | Tilt between 0° - 90° |
| Material / Finishing | Housing/ Electrical connection box / Mounting bracket: PDC Molded aluminum |
| | End caps: PDC Aluminum in BLUE color |
| | Plastics / Cables: UV protected |
| | Standar Raw aluminium color. Optional Dark grey RAL 10714 for Housing, Bracket and Front Face |
| | Driver box is always painted in raw aluminum color *(other paint colors are not possible)* |
| Driver box mains input | Optional 200 - 220V/50-60Hz* or 230-400V/50-60Hz *(tolerances on mains supply voltage fluctuations: -/+ 10%)* |
| | ( * only for Japan version with longer lead time) |
| Inrush current | 20 A during 160 µs at 230 V mains / 30 A during 160 µs at 400 V mains |
| Power factor | > 0.95 at full power |
| Surge protection | 10 kV standard *(driver integral)* |
| Life-time / Lumen maintenance | L80B50: up to 50000 hours |
| Driver box lifetime / Failure rate | 50000 hours at operation temperature range / 0.5% per 5000 hours |
| Luminaire installation | Outdoor: on mast-head frame/wall/catwalk or Indoor: on roof or ceiling/wall or catwalk |
| | U-shaped mounting bracket with foot-print suitable for 3-point fixation by means of M20 bolts |
| | Vertical aiming from the horizontal: -90° / +90° *(not suitable for uplighting, Side lighting, Refer MI sheet)* |
| | Standing-up or hanging-down mounting |
| Driver box installation | Indoor/outdoor open air without need of cabinet or inside electrical cabinet (IP54) or inside electrical room |
| | Either pre-fitted on the luminaire (HGB version) or remotely at max 200 m distance to luminaire |
| | Fixation on flat surface by means 4 standard screws/bolts thru the key slot holes |
| | Universal fixation position *(cable glands never upward for outdoor)* |
| Luminaire electrical connection / Cabling | Luminaires are always supplied with electrical connection box pre-fixed enabling wiring between floodlight and driver box |
| | Cable entry via 1xM25 cable gland accepting cable diameter between 13 and 18 mm and wiring with screw-less terminals for wires up to 2.5mm² |
| Driver box electrical connection / Cabling | Mains input: Screw-less terminals for wires up to 4mm²/ Cable entry via 1xM25 cable gland accepting cable diameter between 13 and 18 mm *(no thru-wiring in/out)* |
| | Output to luminaire: Screw-less terminals for wires up to 2.5mm²/ Cable entry via 1xM25 cable gland accepting cable diameter between 13 and 18 mm |
| | Cable to luminaire (BV version luminaire): One cable of 7-core (8-core for distance > 50m) at length of customer choice *(cables are not supplied by Philips)* |
| DMX-RDM control interface | System connectivity via 2xRJ45 connectors / Cable entry via 1xM20 cable gland accepting two cables (in/out) of 6mm (+/-1mm) diameter to be connected to RJ45 connectors |
| | located inside electrical compartment of driver box. Installer to connect the male connectors of RJ45 after passing thru the cable via cable gland |
| Luminaire accessories | External spill-light control louvre. Precision Aiming Device *(Optional)* |
| Optional versions | CLO / Indoor swimming pool protected (SWP) / Marine salt protected (MSP) |
| Certification / Listing | CE, ENEC,  VDE-Ball proof |
| Packaging content | Contains floodlight and driver box either pre-fitted (HGB) or separate (BV). Driver box of BV version contains a suspension kit with its fixing parts |