

220 V MAINS IN · UP TO 6 PDLC PANELS DRIVEN FROM ONE CHASSIS

DZ6L

6-Channel Multi-Panel Drive

One controller · six channels · feature-wall glazing

Variant A = per-channel sequenced switching · Variant B = bulk all-on / all-off



PRIVASEE® DZ6L drive · wall knob · multi-button RF remote · 4 sub-variants (100A · 100B · 200A · 200B)

DOCUMENT

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01 What it is

★ IN ONE SENTENCE

The **DZ6L 6-Channel Power Drive** is the PRIVASEE® flagship for feature-glazing installations — one chassis drives up to six PDLC panels, each on its own switching channel. It is the right answer when a project has a glazed wall, a sequence of office sidelights, or a set of bathroom panels that need to be controlled together (or in sequence) from one box.

WHAT MAKES IT DIFFERENT FROM THE SINGLE-CHANNEL DRIVES

FEATURE	PJ-C / PJ-D (SINGLE CHANNEL)	DZ6L (THIS DRIVE)
Output channels	1 channel only · all parallel-wired panels switch together	6 independent channels · each panel on its own channel
Panel sequencing	Not possible	Variant A — per-channel switching for "running-lamp" sequence
Bulk control	Yes (one channel = all panels)	Variant B — one command switches all 6 channels at once
Panel count from one drive	1+ (size-limited by wattage budget)	up to 6 independently-controlled panels · or more in groups
Best for	Single-room privacy	Feature glazing wall · multi-room privacy from one cupboard

FOUR SUB-VARIANTS

MODEL	POWER	BEHAVIOUR	TYPICAL USE
DZ6L100A	100 W	6-channel sequenced switching	Feature wall · running-lamp lighting effect across 6 panels
DZ6L100B	100 W	6-channel bulk on/off	Multi-room privacy — one button switches all 6 panels together
DZ6L200A	200 W	6-channel sequenced switching · higher load	Larger feature wall — up to ~26 m ² across 6 panels
DZ6L200B	200 W	6-channel bulk on/off · higher load	Open-plan office · multi-glazing privacy zone

WHERE IT IS TYPICALLY USED

- **Feature-glazing walls** — restaurants, hotel lobbies, executive offices where 4–6 panels form a continuous wall
- **Open-plan offices** — one DZ6L drives the privacy panels of multiple meeting rooms from a single equipment cupboard
- **Multi-room villas** — one DZ6L drives bathroom + dressing-room + en-suite glass simultaneously
- **Theatrical / mood lighting** — the Variant A sequenced mode lets a glazed wall fade in segment-by-segment

- **BMS-integrated commercial buildings** — one chassis = fewer wiring runs to centralise

02 Sub-variants · Variant A vs Variant B

The DZ6L family splits into two channel-control architectures — pick the one that matches the project’s control story.

VARIANT A

DZ6L100A · DZ6L200A

Per-channel sequenced switching

Each of the 6 channels has its own independent switch state. The supplied 6-button RF remote sends one command per channel. Programmable sequence patterns (e.g. running-lamp across 6 panels) are configurable via the wall-knob long-press menu.

Use when each panel needs to be controlled separately or when a sequencing effect is desired.

VARIANT B

DZ6L100B · DZ6L200B

Bulk all-on / all-off

All 6 channels respond to a single command — press one button on the supplied remote and every connected panel switches simultaneously. Simpler control logic, simpler user experience, lower commissioning effort.

Use when all panels switch together (typical multi-room privacy or open-plan office).

HOW TO DECIDE A VS B AT THE PROJECT SPECIFICATION STAGE

QUESTION	ANSWER → VARIANT
Will each panel ever need to switch independently?	YES → A · NO → B
Is a sequenced / running-lamp effect part of the design intent?	YES → A
Will the BMS / HA system need per-zone privacy control?	YES → A
One single "Privacy ON" / "Privacy OFF" for the whole installation?	YES → B
Single-button user interface preferred?	YES → B

VISUAL COMPARISON



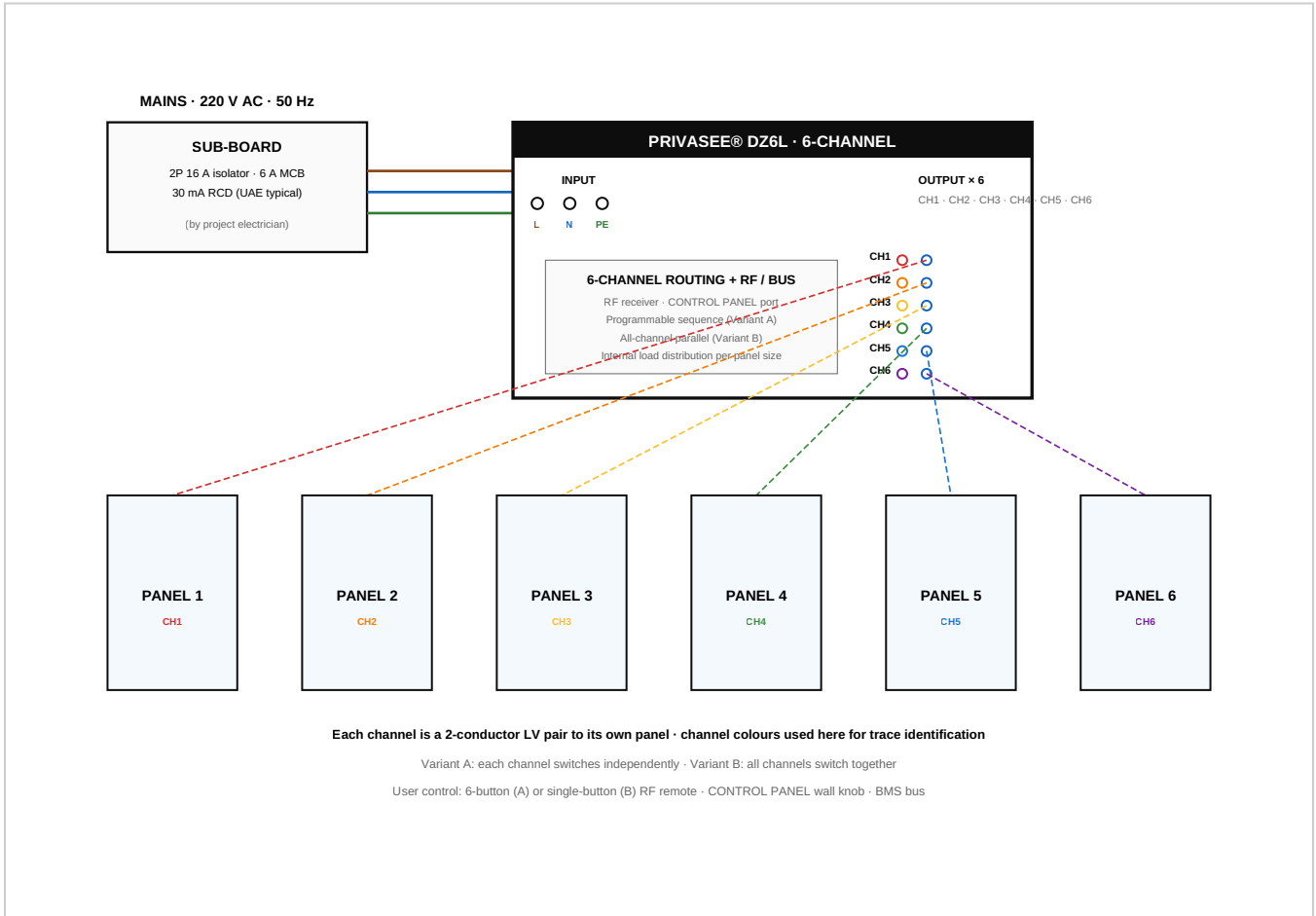
DZ6L100A · 100 W · sequenced — chassis + wall knob + 6-button RF remote



DZ6L200B · 200 W · bulk — chassis + wall knob + simplified remote

03 How it connects

The DZ6L sits between the building mains and up to six PDLC panels. The mains supply is the same as a single-channel drive (220 V AC · 50 Hz · L · N · PE through a 6 A C-curve MCB). The output side fans out into six channel pairs that go to six independent panels.



★ **READING THE DRAWING**

Mains comes in to INPUT (L · N · PE) just like every other PRIVASEE drive. Inside, the DZ6L splits the LV output into 6 separate channel pairs. Each channel feeds one PDLC panel. On Variant A every channel responds individually to user commands; on Variant B all 6 channels follow one master command.

04 Specifications & install rules

COMMON ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE
Input voltage	220 V AC nominal · 110 / 220 V AC selectable variant
Input frequency	50 / 60 Hz
Output voltage	48 V or 60 V AC (specified at order)
Number of output channels	6 independent
Output behaviour	On/off per channel · Variant A = sequenced · Variant B = bulk
Operating temperature	-10 °C to +60 °C
IP rating	IP20 (indoor / dry-zone only)
Cooling	Convection · vented housing · 50 mm clearance recommended

PER-MODEL RATED POWER & TOTAL PANEL BUDGET

MODEL	RATED	TOTAL PANEL AREA (80% RULE)	APPROX. WEIGHT
DZ6L100A	100 W	up to ~8 m ² across 6 panels	~1.5 kg
DZ6L100B	100 W	up to ~8 m ² across 6 panels	~1.5 kg
DZ6L200A	200 W	up to ~16 m ² across 6 panels (~26 m ² @ rated)	~2.0 kg
DZ6L200B	200 W	up to ~16 m ² across 6 panels (~26 m ² @ rated)	~2.0 kg

CHANNEL BUDGETING RULE (IMPORTANT)

★ HOW TO SIZE CHANNELS

Each channel can drive 1 or more panels in parallel up to its share of the drive's rated wattage budget. **Channels share total wattage, not dedicated wattage.** Example for DZ6L200B (200 W rated · 160 W design budget at 80%): six panels of ~2.7 m² each fit comfortably; one channel can carry an oversized panel as long as the total across all 6 channels ≤ 16 m². For unequal channel loading, calculate each channel's load explicitly.

BILL OF MATERIALS · PER INSTALLATION (TYPICAL UAE VALUES)

REF	ITEM	QTY
U1	PRIVASEE® DZ6L drive (100A / 100B / 200A / 200B per project requirement)	1
—	RF remote handset (supplied · 6-button on Variant A · simpler on Variant B)	1
—	CONTROL PANEL wall knob (optional)	0–1

W0	Mains feed cable from sub-board · 3-core 1.5 mm ²	1
W1.1 to W1.6	Per-channel output cables · 2-core 1.5 mm ² LV (≤ 10 m typical)	up to 6
Q1, F1, RCD	Upstream isolator + 6 A C-curve MCB + 30 mA Type AC RCD (UAE typical)	per project
E1 to E6	PRIVASEE® PDLC smart film panels (one per channel or grouped)	up to 6

CHANNEL LABELLING ON SITE

Each output cable should be tagged with its channel number (CH1 through CH6) at both ends. We recommend per-channel tracing colours during install (PRIVASEE engineering Track C palette: red, orange, yellow, green, blue, violet) so the electrician can visually trace any channel from drive to panel during commissioning and maintenance.

▲ WARNING · VARIANT A VS VARIANT B IS LOCKED AT ORDER

Variant A and Variant B chassis use different internal control PCBs. The variant cannot be field-switched after delivery. Confirm A or B in the project order before manufacture / dispatch.

▲ WARNING · OUTPUT TERMINALS ARE 48 / 60 V AC

The 48 / 60 V AC output is hazardous touch voltage if exposed. Land each channel cable into its terminal pair, dress to clear the housing edge, and seal with TOSSEAL 381 silicone at the panel busbar end (per the panel installation manual).

05 Contact & document close

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COMPANION DOCUMENTS

DOC NUMBER	TITLE
PVS-SGS-DAT-DZ6L	DZ6L Multi-Channel Drive — Product Datasheet (compact spec sheet)
PVS-SGS-TEC-01a/b	FM Smart Film Datasheet series (panel side)
PVS-SGS-TEC-02	SG-01 / LG-01 / LG-02 Smart Glass Datasheet
PVS-SGS-QUA-01b	PRIVASEE® Smart Glass Warranty (GCC edition)
PVS-SGS-TEC-11b	Smart Film & Smart Glass Maintenance Guide (GCC edition)

REVISION HISTORY

REV	DATE	DESCRIPTION
1.0	2026-05-05	Initial release · DZ6L family (DZ6L100A/B and DZ6L200A/B) 6-channel multi-panel integration annex

DOCUMENT APPROVAL

ROLE	NAME	DATE
PRIVASEE® preparer	PRIVASEE® Smart Glass Engineering	2026-05-05 · DRAFT
PRIVASEE® approver	[awaiting founder approval]	—
Project licensed electrician	[name · qualification · date]	—

The DZ6L 6-channel multi-panel annex is a standalone document and does not reference other power drives. Comments to info@privasee.uk referencing *PVS-SGS-MAN-DZ6L-INT-01 Rev 1.0*.